



BOROUGH OF ECCLES.

Annual Report

OF THE

Medical Officer of Health

(W. M. HAMILTON, M.D., D.P.H.,)

FOR THE YEAR

1903.

ECCLES:

WM. BOGG & SONS, 167, CHURCH STREET.

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Borough of Eccles.

*With the Compliments
of the Medical Officer of Health.*

*Town Hall.
Eccles*



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Annual Report of the Medical Officer of Health.

1903.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

In presenting my Annual Report on the health of the Borough I beg once more to tender my grateful thanks for the uniform support that has been afforded me throughout the year. It is a source of great assistance to an official engaged in carrying out the important duties, which falls to the lot of a Medical Officer of Health, to have the sympathetic support of the Chairman and Committee.

The year 1903 has been marked by a distinct advance in Sanitary work. The year started very inauspiciously with epidemics of Smallpox and Diphtheria, which entailed a large amount of anxiety to the officials, and which were very successfully dealt with.

It is pleasing to again note the decline in the death rate, which was 14·8 for the year, as compared with 15·8 for 1902. The death rate has only once been so low in the last 27 years.

It is a matter for regret that the Infantile Mortality is slightly higher than last year, being 121 as compared with 112 for the year 1902, but even this shows a distinct advance on 1901, when the death rate was 164 per 1,000 registered births.

There is also an increase to be recorded in the birth rate, which was 28·4, as compared with 27·1 for the year 1902.

The number of Notifications of Infectious Disease (411) was slightly in excess of 1902, when it was 404, but as will be noticed from the Table giving the Monthly Returns of Infectious Disease, 315 of the 411 cases were notified during the first six months of the year.

The Bakehouses have all been inspected throughout the year. The underground bakehouses were specially dealt with, and have all been closed—with the exception of two, but these will be closed up on or before the 25th of March, 1904.

The Dairies, Cowsheds, and Milkshops have all been regularly and systematically inspected during the year.

The work arising out of the administration of the Factory and Workshops' Act has been thoroughly carried out.

I should like to call the Committee's attention to the large amount of work entailed on the staff through the notifications of sickness received from the various schools throughout the year. 1216 visits were paid, as compared with 1042 for 1902 ; 939 for 1901 ; and 314 for 1900.

I cannot end this Report without bearing testimony to the extremely valuable assistance I have received on all occasions from the Chief Inspector, Mr. C. W. LASKEY, and his energetic Assistant, Mr. G. LAWS.

I am, Gentlemen,

Your obedient Servant,

W. M. HAMILTON.

HEALTH COMMITTEE.

Municipal Year Ending 1903.

Chairman—Alderman N. PARR, J.P.

Vice-Chairman : Alderman S. MELLOR, J.P. C.C.

THE MAYOR (ALDERMAN W. D. KENDALL, J.P.)

ALDERMAN F. SMITH, J.P.

Councillor W. J. NUTTALL, J.P.

„ W. PEARSON.

„ J. R. PLEWS.

„ E. POTTS.

„ A. B. WIMPORY.

HEALTH COMMITTEE.

Municipal Year Ended 1904.

Chairman : Alderman N. PARR, J.P.

Vice-Chairman : Alderman S. MELLOR, J.P., C.C.

Alderman F. SMITH, J.P.

Councillor W. J. NUTTALL.

„ W. PEARSON.

„ J. R. PLEWS.

E. POTTS.

Meetings of the Health Committee held on the First Wednesday
in each Month at 3 p.m. in the Town Hall.

SECTION I.

—O—

GEOLOGY, TRADE, Etc. of the DISTRICT.

SECTION I.

GEOLOGY, TRADE, Etc. of the DISTRICT.

The Borough of Eccles is situate four miles West from Manchester. It extends from the Gilda Brook, the boundary of the Royal Borough of Salford, westward for about two and three quarter miles. It is bounded on the West by Chat Moss, and on the South by the Manchester Ship Canal.

The area of the Borough is 2,008 acres, and the population, according to the last Census, 34,369—now estimated at 36,400.

The substratum rock is mainly red sandstone, considerable patches of the boulder clay remain in places. In the Peel Green or West end of the borough—in Barton Road by the Bridgewater Canal, and by the side of the Ship Canal are found beds of drift sand. At Monton Green the Slack Lane coal is found six feet from the surface, being overlaid by the boulder clay.

The rivers in the Borough are the Manchester Ship Canal, Folly Brook and Gilda Brook.

Few complaints as to the state of the Ship Canal were received during the year.

FOLLY BROOK.—This stream was frequently offensive.

GILDA BROOK.—This stream has been found clear when inspected.

OPEN SPACES.—The Recreation Grounds have been used to a great and increasing extent by the public. The provision of music weekly in each ground has been a great inducement to keep the people in the open air.

BATHS.—24390 persons used the Baths during the year. Of these 4483 availed themselves of the arrangements made by the Baths Committee for free bathing. If it had not been for the cold and unseasonable weather which prevailed during the year, there is no doubt that these numbers would have been considerably increased.

TRADE AND MANUFACTURES.—The cotton and iron trades provide the principal industries of the Borough, but there are also silk mills, metallurgical works, and other industries.

WATER SUPPLY.—This is from the Manchester Corporation, and is, as a rule, excellent.

SECTION II.

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STATISTICAL SUMMARY, 1903.

STATISTICAL SUMMARY, 1903.

SECTION II.

POPULATION estimated to the middle of the year ...	35,600
BIRTHS—Males, 527; Females, 487.	1,014
ANNUAL RATE of BIRTHS per 1,000 of population ...	28·4
DEATHS—Males, 284; Females, 274	558
ANNUAL DEATH-RATE per 1,000 of the population, after deducting the Deaths belonging to out-districts, and adding Deaths of residents occurring outside district...	14·8
ZYMOTIC DEATH-RATE	1·6
INFANTILE MORTALITY (per 1,000 Births)	121
EXCESS of REGISTERED BIRTHS over DEATHS ...	456
DENSITY.—The Mean Density of the Borough per acre is equal to	17·7
Persons per acre:—In BARTON WARD	14·9;
ECCLES WARD,	48·4; IRWELL WARD, 30·8;
MONTON & PARK WARD,	10·7; PATRICROFT
WARD, 41·4; WINTON WARD,	10·5.
AREA :—The total Area of the Borough of Eccles ...	2,008
RATEABLE VALUE	£142,589
NETT VALUE of a PENNY RATE	£572

England and Wales, 1903.

BIRTH RATE	28·4
DEATH RATE	15·4
ZYMOTIC DEATH-RATE	1·46
INFANTILE MORTALITY (per 1,000 Births)	132

SECTION III.

—O—

VITAL STATISTICS.

SECTION III.

VITAL STATISTICS.

ESTIMATED POPULATION.—The census returns taken in April 1901 shew that the population at that date was 34,369. The population has to be estimated to the end of June (middle of the year); and I now estimate the population at 35,600.

Table Shewing Acreage, Number of Houses, and Population of the various Wards at Census, and estimated at the end of June, 1903.

Ward.	Acreage.	Census 1901						Estimated June, 1903			Population.
		Dwelling-houses.			Population.			Dwelling-houses.			
		Inhabi- ted.	Unin- habit'd	Total	Males	Fe- males.	Total.	Inhabi- ted.	Unin- habit'd	Total	
BARTON	378	1162	45	1207	2662	2754	5416	1277	34	1311	5666
ECCLES	106	1075	32	1107	2311	2609	4920	1187	23	1210	5140
IRWELL	167	1128	54	1182	2475	2664	5139	1128	25	1153	5155
MONTON and PARK	528	1132	68	1200	2214	3226	5440	1269	59	1328	5665
PATRICROFT ...	170	1329	41	1370	3320	3448	6768	1439	17	1456	7046
WINTON	659	1450	43	1493	3212	3474	6686	1510	28	1538	6928
TOTALS FOR THE BOROUGH	2008	7276	283	7559	16194	18175	34369	7810	186	7996	35600

BIRTHS.—The number of Births registered during the year was 1014, as against 950 for 1902. Of these 527 were males, and 487 females; this gives a Birth rate of **28·4** per 1,000 of the Population, as against 27·1 for 1902; 27·0 for 1901; and 25·0 for 1900. There were 47 illegitimate births, being 4·6 per cent of the total number of births.

DEATHS.—Of the 558 deaths registered as having occurred within the Borough, 284 were males, and 274 females; 103 deaths occurred at the Barton Union Workhouse, and of these 54 were of persons belonging to outside districts. Seven other deaths of persons belonging to outside districts occurred at various places in the Borough. (See table.) Twenty-one deaths belonging to this Borough occurred at the Ladywell Sanatorium, and nine in Institutions in Manchester, Salford, and other districts. After correcting for the above, the Death-rate for the year is **14·8** per 1,000 of the population, as against 15·8 for 1902. The mean Death rate for the five years ending 1900 was 16·3.

Table of Births and Deaths belonging to various Wards.

Ward.	Total Deaths.	Death rate per 1,000.	Births.	Birth rate per 1,000.
BARTON	100	17·6	196	34·5
ECCLES	70	13·6	114	22·1
IRWELL	103	20·0	168	32·5
MONTON & PARK ...	57	10·0	119	21·0
PATRICROFT	107	15·1	200	28·3
WINTON	90	13·0	217	31·3
TOTALS for the BOROUGH	527	14·8	1014	28·4

The Death rate varies from 10·0 in the Monton and Park Ward to 20·0 in the Irwell Ward.

The Birth rate varies from 21·0 in the Monton and Park Ward to 34·5 in the Barton Ward.

It is gratifying to note that there is a marked diminution in the death rate, equal to 1·0 per 1,000 in the Borough, as compared with 1902. It is markedly lower than the average for any period for the last 27 years. Only once during the last 27 years has the death rate been lower, viz: 1894, 13·0.

I append the following table, shewing the mortality rates for England and Wales, and in the 179 Towns.

1903	Birth rate.	Death-rate per 1000 living.		Infantile Mortality
	Per 1000 living.	All causes	Principal Zymotic Diseases.	Rate under 1 year per 1000 Births
England and Wales	28·4	15·4	1·26	132
76 Great Towns	29·7	16·3	1·89	144
103 Smaller Towns	27·4	14·6	1·41	135
Eccles	28·4	14·8	1·6	121

The death rate was highest in Irwell Ward, 20·0. Deducting the population of this Ward, and the number of deaths therein from the general death-rate, the rate in the rest of the Borough is equivalent to 13·9 per 1000 per annum.

It will thus be seen that the death-rate for this Ward is 6·1 per 1000 higher than the rest of the Borough.

As before stated, 61 deaths occurred in the Borough of persons from outside districts. I append a table shewing the Localities from which they came, and to which districts they have been allotted.

***Deaths which occurred within the District of Persons
not belonging thereto.***

Place of Residence.	Place of Death.	No. of Deaths.
Salford	UNION WORKHOUSE	3
Flixton	Do.	1
Worsley	Do.	11
Swinton	Do.	12
Stretford	Do.	21
Urmston	Do.	3
Barton Moss	Do.	1
Irlam	Do.	2
Manchester	St. Joseph's Home	2
Chester	Do.	1
Stockport	Bridgewater Canal	1
Swinton	Do.	1
Worsley	Do.	1
Salford	Eccles and Patricroft Hospital..	1
	Total	61

MORTALITY IN AGE GROUPS :—

Deaths under one year	...	...	...	...	123
do. 1 year and under 5 years				...	58
do. 5 years and under 15 years				...	26
do. 15 years and under 25 years				...	25
do. 25 years and under 65 years				...	183
do. over 65 years	...	...	...	...	112
					<hr/> 527

INFANTILE MORTALITY :—

The total number of deaths under one year was 123 ; this gives a rate of 121 per thousand births as compared with 112 for 1902 ; 164 for 1901 ; 158 for 1900 ; 151 for 1899 ; and 176 for 1898.

ZYMOTIC DEATH-RATE :—

The number of deaths due to the “seven principal zymotic diseases”* usually classified under this heading was 59. This gives a zymotic death rate of 1·6 per 1,000 of the population as compared with 2·2 for 1902 ; 2·7 for 1901 ; 2·5 for 1900 ; and 3·5 for 1899. The mean for the five years ending 1900 was 3·0.

Small-Pox. Two deaths, both of which occurred in the Small-pox Isolation Hospital.

Scarlet Fever. Three deaths were due to this disease.

Measles. Fifteen deaths were due to this disease, 13 of these being children below the age of five years

Enteric or Typhoid Fever. Three deaths, of which two occurred in the Ladywell Sanatorium.

Diphtheria.—Twenty-three deaths were due to this disease, of which 16 occurred in the Sanatorium.

Whooping Cough.—There were 2 deaths, both being below five years of age.

Diarrhœa and Dysentery.—There were 11 deaths, 10 being below the age of five years.

Influenza.—Two deaths were attributed to this disease.

* Small-Pox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, (Fever—Typhus, Typhoid, and Continued) and Diarrhœa,

Erysipelas.—There were two deaths registered as being due to this disease.

Puerperal Fever.—One death was due to this disease.

Bronchitis, Pneumonia, and Pleurisy.—The deaths from these diseases numbered 94. This gives a death-rate of 2·6 per 1,000, as compared with 2·5 for 1902, 2·7 for 1901, 2·9 for 1900, 2·7 for 1899, and 2·7 for 1898. The mean of the five years ending 1900 was 2·7.

Phthisis.—Thirty-three deaths were registered as being due to this disease. This gives a rate of 0·92 per 1,000 of the population, as compared with 0·8 for 1902.

Inquests.—There were 34 inquests held during the year.

**Total Deaths and Death-rates from all causes. Children under 5 years
of Age. Zymotic and Pulmonary Diseases.
For the Years 1876-1903.**

Year.	Total Deaths	Rate per 1000	Zymotic Diseases	Rate per 1000	Deaths under 5	Rate per cent.	Phthisis	Rate per 1000	Acute Chest Diseases	Rate per 1000.
1876	423	25.4	66	3.9	158	37.5	53	3.1	100	6.0
1877	440	22.7	89	4.6	175	40.0	46	2.3	84	4.3
1878	443	22.2	68	3.4	196	44.2	49	2.4	90	4.5
1879	396	19.2	28	1.3	177	43.8	60	2.9	116	5.6
1880	437	20.5	87	4.0	176	43.7	59	2.7	96	4.5
5 years average	427	22.0	67	3.4	176	41.8	53	2.6	97	4.9
1881	383	17.4	56	2.5	155	40.4	66	3.0	70	3.1
1882	434	19.0	59	2.5	190	49.0	46	2.0	113	4.9
1883	371	15.7	53	2.2	173	47.0	45	1.9	90	3.8
1884	399	16.4	83	3.4	181	45.0	41	1.6	87	3.5
1885	419	16.6	54	2.1	157	37.0	46	1.8	91	3.6
5 years average	401	17.0	61	2.5	171	43.6	48	2.0	90	3.7
1886	419	16.1	47	1.8	186	44.1	40	1.5	93	3.5
1887	475	17.8	90	3.3	219	42.6	41	1.5	127	4.7
1888	437	15.9	54	1.9	183	41.8	49	1.7	100	3.6
1889	405	16.4	79	2.7	213	45.8	49	1.7	93	3.2
1890	603	20.8	50	1.7	218	36.1	50	1.7	142	4.9
5 years average	479	17.4	64	2.2	203	42.0	45	1.6	111	3.9
1891	683	22.3	94	3.1	292	42.7	43	1.4	143	4.7
1892	554	18.1	35	1.1	205	37.0	50	1.6	93	3.0
1893	608	18.6	82	2.5	247	40.6	39	1.2	113	3.5
1894	443	13.0	49	1.4	183	41.3	47	1.4	74	2.3
1895	552	16.2	104	3.1	239	41.4	54	1.6	97	2.9
5 years average	568	17.6	72	2.2	233	40.6	45	1.4	104	3.2
1896	551	15.7	104	3.0	221	40.1	50	1.4	76	2.2
1897	580	16.7	94	2.7	248	42.7	56	1.6	115	3.3
1898	573	16.6	114	3.2	232	40.0	44	1.2	95	2.7
1899	600	16.7	127	3.5	215	35.8	46	1.2	98	2.7
1900	619	17.0	91	2.5	220	35.5	38	1.04	107	2.9
5 years average	585	16.5	86	3.0	227	38.8	47	1.3	98	2.7
1901	570	16.5	94	2.7	217	38.0	43	1.2	94	2.7
1902	553	15.8	79	2.1	181	32.9	29	.8	90	2.5
1903	527	14.8	59	1.6	181	34.3	33	.92	94	2.6

BOROUGH OF ECCLES.
Vital Statistics of separate Localities in 1903 and previous years.

Names of localities	Whole District.						Barton Ward.				Eccles Ward.				Irwell Ward.				Monton Ward.				Patricroft Ward.				Winton Ward.			
	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.		
YEAR.																														
1893	30740	903	592	174	4807	188	112	40	4326	101	66	15	4525	151	107	44	4846	110	55	11	6158	171	152	32	6078	178	100	32		
1894	31210	878	418	125	4885	171	73	25	4404	118	53	12	4603	128	57	20	4924	92	41	4	6238	181	122	35	6156	188	72	29		
1895	31680	927	532	157	4963	183	87	32	4482	121	63	17	4681	137	75	29	5002	102	46	9	6118	181	142	38	6334	203	119	42		
1896	32150	955	534	138	5041	179	87	27	4570	129	61	10	4759	129	81	29	5080	107	57	9	6398	184	148	33	6312	230	100	30		
1897	32620	960	580	168	5119	168	91	35	4638	127	77	18	4837	106	103	30	5158	81	66	12	6478	187	144	33	6390	231	99	40		
1898	33000	933	581	164	5197	149	88	27	4716	152	79	23	4955	139	89	32	5236	92	49	6	6558	209	152	31	6468	192	124	45		
1899	33560	918	600	139	5275	171	85	19	4794	121	85	18	4993	134	115	31	5314	87	56	8	6638	211	163	32	6546	195	96	31		
1900	34030	913	619	145	5353	163	117	23	4872	128	72	17	5071	165	135	39	5392	81	50	5	6718	194	109	43	6624	182	136	38		
1901	34500	931	575	153	5431	131	97	29	4950	134	78	19	5149	147	130	35	5470	106	50	10	6798	199	104	27	6702	214	116	33		
1902	35000	950	553	107	5536	169	88	15	5010	114	89	14	5155	154	107	23	5545	90	64	6	6926	209	116	23	6828	234	89	26		
Averages of Years 1893 to 1902	32858	927	558	147	5160	167	92	27	4675	124	72	16	4868	137	100	31	5196	94	53	8	6522	192	135	29	6433	204	105	34		
1903	35620	1014	527	123	5666	196	100	25	5140	114	70	12	5155	168	103	39	5665	119	57	5	7046	200	107	20	6928	217	90	22		

Borough of Eccles.

Vital Statistics of whole district during 1903, and previous years.

Year.	Population estimated to middle of each year.	Births		Deaths under 1 year of Age.		Deaths at all ages. Total		Deaths in Public Institutions.	Deaths of non-residents registered in district	Deaths of residents registered beyond district.	Deaths at all ages. Nett	
		Number	Rate *	Number	Rate per 1 000 births registered.	Number	Rate *				Number	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1893	30740	903	29·3	174	192	608	19·7	78	21	5	592	19·2
1894	31210	878	28·1	125	142	443	14·1	66	27	2	418	13·3
1895	31680	927	29·2	157	168	552	17·4	72	26	6	532	16·7
1896	32150	958	29·7	138	144	541	16·8	56	17	10	534	16·6
1897	32620	960	29·4	168	186	609	18·6	79	31	2	580	17·7
1898	33090	933	28·1	164	176	589	17·8	74	33	25	581	17·5
1899	33560	918	27·3	139	151	614	18·2	85	48	34	600	17·8
1900	34030	913	26·8	145	158	653	19·1	102	62	28	619	18·1
1901	34500	931	26·9	153	164	595	17·2	96	52	32	575	16·6
1902	35000	950	27·1	107	112	583	16·6	123	69	39	553	15·8
Averages for Years 1893—1902	32858	927	28·2	147	159	573	17·5	83	38	18	557	16·9
1903	35600	1014	28·4	123	121	558	15·2	117	61	30	527	14·8

* Rates in columns 4, 8, and 13 calculated per 1000 of estimated population,

Area of District in acres (exclusive of area covered by water)..... 2,008

Total population at all ages 34,369

Number of Inhabited Houses 7276

Average number of persons per house 4·7

(At Census of 1901.)

BOROUGH OF ECCLES.

Causes of, and ages at, Death during the Year 1903.

Causes of Death.	Deaths in or belonging to the whole district at subjoined ages.							Deaths in or belonging to localities (at all ages).						
	All ages	Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	Barton Ward	Eccles Ward.	Irwell Ward	Monton Ward	Patricroft Ward	Winton Ward	Deaths in Public Institutions. in the district
Small-pox ...	2	...	...	...	...	2	...	...	...	2	...	...	...	...
Measles. ...	15	4	9	2	...	...	...	8	3	...	...	...	4	1
Scarlet Fever ...	3	...	2	...	1	...	...	...	...	1	...	2	...	...
Whooping Cough ...	2	...	2	...	...	...	...	...	...	...	...	1	1	...
Diphtheria and Membranous Croup ...	23	...	11	11	...	1	...	7	1	2	...	10	3	...
Croup ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever. { Typhus	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Enteric	3	...	...	...	1	2	...	1	1	1	...	...	...	...
{ Other continued	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza ...	2	...	...	...	...	2	...	...	2	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa ...	11	7	3	...	...	1	...	2	3	2	1	2	1	...
Enteritis ...	13	10	1	...	1	1	...	4	...	4	...	3	2	...
Puerperal Fever ...	1	...	...	...	...	1	...	...	...	1	...	...	...	...
Erysipelas ...	2	...	...	...	2	...	...	...	...	...	...	2	...	1
Other septic diseases ...	1	...	...	...	...	1	...	...	...	...	...	1	...	1
Phthisis ..	33	...	1	1	3	28	...	7	7	9	1	5	4	12
Other tubercular diseases	21	6	7	2	1	5	...	3	1	3	3	6	5	1
Cancer, malignant do.	20	...	...	...	...	14	6	1	2	4	4	5	4	8
Bronchitis ...	46	11	7	2	...	10	16	8	4	7	9	11	7	10
Pneumonia ..	45	8	6	1	2	20	8	9	4	8	7	8	9	10
Pleurisy ...	3	...	...	...	1	1	1	2	1	...	...	...	...	...
Other diseases of the respiratory organs ...	2	...	...	...	1	...	1	...	...	...	1	1	...	...
Alcoholism ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of liver ...	11	...	...	...	...	10	1	2	3	2	...	1	3	...
Venereal diseases ...	1	...	...	...	...	1	...	...	...	1	...	...	...	...
Premature birth ...	19	19	...	...	...	...	...	4	1	9	...	...	5	1
Diseases and accidents of parturition ...	9	2	...	...	1	6	...	2	...	3	1	1	2	2
Heart Diseases ...	30	...	1	...	2	17	10	5	4	6	5	7	3	14
Accidents ...	8	...	...	1	...	5	2	3	2	...	...	2	1	4
Suicides ...	6	...	...	...	...	6	...	1	...	...	...	2	3	...
All other causes	195	56	8	6	9	49	67	31	31	38	25	37	33	52
All causes	527	123	58	26	25	183	112	100	70	103	57	107	90	117

SECTION IV.

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RECORD OF INFECTIOUS DISEASES.
AND MEASURES TAKEN TO PREVENT THEIR SPREAD.

SECTION IV

RECORD OF INFECTIOUS DISEASES,
AND MEASURES TAKEN TO PREVENT THEIR SPREAD.

NOTIFICATION OF INFECTIOUS DISEASES.—The total number of cases notified during the year was 411, as compared with 404 for 1902, 294 for 1901, 441 for 1900, 359 for 1899, 247 for 1898, 164 for 1897, and 307 for 1896. As will be seen by the Tables the majority of notifications were of scarlet fever and diphtheria. All the notifications were sent in by medical practitioners.

NOTE.—Ninety-two cases of Chicken-pox are included in the number of cases notified during the year.

Diseases.	1892.		1893.		1894.		1895.		1896.		1897.		1898.		1899.		1900.		1901.		1902.		1903.		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	
SMALL-POX ...	...	...	10	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	2	Under 5... 5 upwards
SCARLET FEVER ..	86	2	315	9	311	6	215	8	186	11	91	3	100	6	207	10	68	6	42	4	61	7	27	2	Under 5... 5 upwards
DIPHTHERIA ..	29	7	43	6	36	7	28	...	25	3	23	5	36	7	88	24	37	8	27	5	27	6	35	11	Under 5... 5 upwards
MEMBRANOUS CROUP	...	...	...	...	2	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Under 5... 5 upwards
ENTERIC FEVER ..	34	3	72	8	34	7	38	4	66	9	20	3	66	10	46	10	4	6	5	1	1	...	2	...	Under 5... 5 upwards
PUERPERAL FEVER	...	...	9	2	6	2	4	1	5	2	3	2	2	...	1	1	...	1	5	5	5	...	2	1	Under 5... 5 upwards
MEASLES ...	...	8	...	7	...	...	...	26	...	43	...	17	5	...	3	...	8	1	...	7	...	...	11	13	Under 5... 5 upwards
WHOOPING COUGH	...	3	...	10	...	7	...	13	...	12	...	13	5	...	...	19	...	3	...	5	...	24	...	2	Under 5... 5 upwards
DIARRHŒA and DYSENTERY ... }	...	12	...	38	...	20	...	53	...	26	...	51	79	...	61	...	39	5	...	7	...	7	...	10	Under 5... 5 upwards
ERYSIPELAS ...	...	...	29	2	29	3	15	1	25	1	27	2	43	1	17	2	1	1	3	1	3	1	...	2	Under 5... 5 upwards
CHICKEN-POX ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13	...	35	...	Under 5... 5 upwards
Total ...	149	35	478	82	421	56	302	106	307	107	164	96	247	115	359	130	110	64	77	67	105	56	100	38	Under 5... 5 upwards

Borough of Eccles—Cases of Infectious Disease Notified during the year 1903.

Notifiable Disease.	Cases Notified in whole District.						Whole District.	Total Cases Notified in each locality.						No. of Cases removed to Hospital from each locality							
	At all Ages	Under 1 Year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65		65 and upwards.	Barton Ward	Eccles Ward	Irwell Ward	Monton Ward	Patricroft Wd	Winton Ward	Barton Ward	Eccles Ward	Irwell Ward	Monton Ward	Patricroft Wd	Winton Ward	
Small-pox	14	..	..	..	4	10	..	14	2	3	6	....	2	1	14	2	3	6	..	2	1
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	126	..	35	72	10	9	..	126	26	14	18	11	39	18	77	15	7	12	2	23	18
Membranous Croup	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	21	..	..	2	5	14	..	21	3	1	5	4	5	3	..	..	..	..	..	..	..
Scarlet Fever	139	..	27	99	9	4	..	139	25	17	18	16	37	26	31	5	3	3	5	13	2
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	16	..	2	3	2	9	..	16	5	4	2	2	2	1	5	1	1	1	1	1	..
Relapsing Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	2	..	..	..	..	2	..	2	1	..	1	..	..	..	1	1	..	..	..	..	..
Plague ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	92	7	28	55	2	..	..	92	6	6	12	18	14	36	..	..	..	..	..	..	..
PRUTHISIS ...	34	1	3	3	6	20	1	34	4	7	9	..	8	6	..	..	..	..	..	..	..
Totals	445	8	96	234	38	68	1	445	73	52	71	51	107	91	128	24	14	22	8	39	21

Isolation Hospital situate in the Borough of Salford.

Monthly Return of Notification of Infectious Diseases.

1903	Membranous Group	Scarlet Fever	Small-pox.	Diphtheria	Enteric Fever	Puerperal fever	Erysipelas	Chicken-pox	Totals.
January ...	1	17	6	48	...	...	2	16	90
February...	...	15	1	27	1	1	2	5	52
March	23	2	12	2	...	1	9	49
April	15	2	9	2	...	2	7	37
May	17	2	9	1	1	3	21	54
June	16	...	11	1	...	4	2	34
July	9	...	4	1	...	1	3	18
August	5	...	3	...	...	1	4	13
September.	...	9	...	1	2	...	...	8	20
October	4	...	...	3	...	...	8	15
November	6	...	2	1	...	2	9	20
December	3	1	...	2	..	3	...	9
Totals ..	1	139	14	126	16	2	21	92	411

Distribution of Infectious Diseases into Wards.

Diseases.	BARTON		ECCLES		IRWELL		MONTON and PARK		PATRI- CROFT.		WINTON.		Total.	
	Total Notified	Total Deaths.	Total Notified.	Total Deaths.	Total Notified	Total Deaths.	Total Notified.	Total Deaths.	Total Notified.	Total Deaths.	Total Notified.	Total Deaths.	Cases Notified	Deaths
SMALL-POX	2	..	3	...	6	2	...	...	2	...	1	...	14	2
SCARLET FEVER	25	...	17	...	18	1	16	...	37	2	26	...	139	3
DIPHTHERIA and	27	7	14	1	18	2	11	...	39	10	18	3	127	23
MEMBRANOUS CROUP														
ENTERIC FEVER	5	1	4	1	2	1	2	...	2	...	1	...	16	3
PUERPERAL FEVER	1	...	...	...	1	1	...	...	...	...	...	...	2	1
MEASLES .. ... ..	...	8	...	3	...	...	...	...	...	...	...	4	...	15
WHOOPIING COUGH ... ..	...	...	...	...	...	...	...	...	...	1	...	1	...	2
DIARRHŒA and } DYSENTERY. }	...	2	...	3	...	2	...	1	...	2	...	1	...	11
ERYSIPELAS	3	...	1	...	5	...	4	...	5	2	3	...	21	2
CHICKEN-POX... ..	6	...	6	...	12	...	18	...	14	...	36	...	92	...
TOTAL	69	18	45	8	62	9	51	1	99	17	85	9	411	62

AMOUNT OF HOSPITAL ISOLATION OF INFECTIOUS DISEASES.—There were 128 cases of infectious diseases removed to hospital, being 40·1 per cent of the total number of cases notified (excluding Chicken-pox).

Small-Pox	cases notified	14,	removed	14,	per centage	100
Scarlet Fever	do.	139,	do.	31,	do.	22·3
Diphtheria and						
Membranous Croup	do.	127,	do.	77,	do.	60·6
Enteric fever	do.	16,	do.	5,	do.	31·2
Puerperal fever	do.	2,	do.	1,	do.	50·3
Erysipelas	do.	21,	do.	nil.	do.	nil.
Chicken-Pox	do.	30,	do.	nil.	do.	nil.

In 1902, 48·7 per cent of notified cases were removed, 50·0 per cent in 1901, 38·5 per cent in 1900, 44·5 per cent in 1899, and 34·4 per cent in 1898.

NOTIFICATION FROM SCHOOLS.—During the year the following notifications were received from the various schools :

	1903	1902	1901	1900
MEASLES	831	389	638	225
CHICKEN-POX	140	161	59	24
WHOOPING COUGH	29	281	77	26
MUMPS	71	52	135	29
ECZEMA	63	35	9	...
RINGWORM	16	74	...	...
OTHER DISEASES	66	50	21	10
Totals	1216	1042	939	314

Suggestions for Preventing the Spread of Infectious Disease.

In order to prevent disease and suffering, the Health Committee appeals to the parents and attendants of patients suffering from infectious disease to observe the following instructions :—

1.—Isolate the Sick—

The patient should be at once separated from the other inmates of the house, and, if possible, placed in a top room, and have that floor devoted to himself and his attendant.

All bed curtains and other hangings, carpets, rugs, and all articles of dress and the like in wardrobes and cupboards, and all unnecessary articles of furniture should be removed.

2.—Ventilate Sickroom and House—

The room should be kept well ventilated, windows should be kept partly open (the patient being protected from draughts by a screen when necessary), communication with the chimney should be kept free, and, weather permitting, a fire should be kept burning. The floor should be sprinkled with disinfecting fluid and cleansed daily.

3.—Place Antiseptic Sheet outside Sickroom Door—

The door should be kept closed, and a sheet kept wet with Izal, Sanitas, or other disinfectants, should be hung outside so as to cover every crevice.

4.—Disinfect all Discharges from Patient—

Everything that passes from the patient (sputum, vomit, urine, fæces) should be received in vessels containing a disinfectant, and an additional quantity of the disinfectant should be added to the vessel before removing it from the room. All food and drink not used should be mixed with disinfectant and should not, under any circumstances, be partaken of by other persons.

In typhoid fever, the pail supplied must be used for the reception of all slops, etc., referred to in the foregoing.

5.—Do not use Handkerchiefs—

In diphtheria and phthisis, pieces of rag should be used for sputum and discharges from the nose and mouth, and should be immediately burnt.

6.—Disinfect all Utensils—

All cups, glasses, spoons, or such like articles used in the sick-room should be placed in disinfectant solution before being removed therefrom, and they should be subsequently washed in hot water.

7.—Disinfect Patient's Linen—

All bed and body linen after use should be at once, before being removed from the room, put into the disinfectant solution, and after remaining in this for at least an hour may be washed. At the termination of the illness the premises will be thoroughly disinfected under the direction of the sanitary staff.

8.—Keep Surroundings Clean—

The patient's body and the bed should be kept scrupulously clean, and when during the progress of scarlet fever or small-pox scales or crusts form on the skin, their diffusion should be prevented by smearing the body from head to foot with oil (carbolic, Sanitas, or eucalyptus). The house should be well ventilated and kept very clean; all sinks, water closets, traps and gullies should be in good order, and have Izal or other disinfectant poured into them daily.

9.—Nursing Arrangements—

Nurses or others in attendance should wear overalls or dresses of washable material; they should keep their hands clean, adding

Izal, Sanitas, or Condy's fluid to the water in which they wash. They should remain with the patient, but, if compelled to leave the room, they should leave the overall or apron behind. They should not mix with the other members of the household.

10.—Visitors should not be received

11.—Vaccination—

In cases of small-pox all the members of the household should be vaccinated.

12.—Observe precautions during Convalescence—

The patient must not be allowed to mix with the other members of the household until—in scarlet fever—all “peeling” of skin, and all discharges from the ears and nose have ceased ; in diphtheria—all discharges have ceased ; in small-pox—all scabs have fallen off. The patient must be thoroughly cleansed by the use of a warm bath containing Izal or other disinfectant, and his removal from the room must be sanctioned by the medical practitioner. Clothes used during the illness or in any way exposed to infection, must not be worn again or put away in drawers or wardrobes until they have been properly disinfected.

13.—Final Disinfection—

When the sickness has terminated, the room and its contents should be disinfected. This work will be carried out by the sanitary staff.

Householders are hereby notified that when scarlet fever patients are treated at home, disinfection of bedding, premises, &c. cannot be carried out till the expiration of at least six weeks from the commencement of the last case of such illness in the house.

14.—Special Precautions in Case of Death—

Should death occur, the body must, as soon as possible, be placed in a coffin which should be, at once, screwed down ; the funeral must take place within 48 hours of death. Mourners should not meet in the room in which death took place.

Izal and other disinfectants can be obtained free of cost on application at the Town Hall, and the disinfection of rooms will be carried out free of cost. Rooms which have been occupied by a person who has died of phthisis (consumption) should be disinfected

SMALL-POX.

Small-pox first appeared in Eccles on December 3rd, 1902, the case being that of a tramp who had arrived at the Workhouse the previous day. He was immediately removed to the Mode Wheel Hospital. The whole of the contacts in the tramp ward were re-vaccinated and afterwards quarantined for fourteen days.

The particulars of each case, placed in chronological order, will be found on page 40.

Upon the outbreak of the disease at the casual ward the Guardians promptly arranged for the hire of what is known as the Children's Nursery premises in Green Lane, and there all casuals were lodged during the quarantine period after the first case. Subsequently the Guardians only admitted to the casual ward those who had been re-vaccinated or who would submit to re-vaccination, and the Nursery premises were used for observing suspicious cases of sickness before passing them into the Workhouse Infirmary.

The first, second and third cases were removed from the Union Workhouse.

The fourth case was removed from the Eccles Common Lodging House and the eleventh from the one at Patricroft. The last case notified was removed from a small shop and the remainder from private houses. The eleventh case was that of a man who had been repeatedly offered re-vaccination but it was invariably refused.

Immediately upon the appearance of the disease the common lodging houses were visited nightly, the inmates were inspected and re-vaccination was offered. This nightly inspection continued for four months, *i.e.* January, February, March and April. For fourteen nights after the cases occurred in the common lodging houses new comers were excluded unless they submitted to re-vaccination or had recently been re-vaccinated

House to house inquiries were made in the neighbourhood of each case as they were reported, the following warning leaflet was left with the occupiers and they were advised as to the precautionary measures to be adopted.

SMALL-POX.

A WARNING.

This terrible disease having appeared in the immediate neighbourhood, all residents are requested to assist the Health Officers by remaining, as far as possible, in their own homes and by not visiting their friends and neighbours, or entering public houses or other public places.

Any case of sickness should be at once reported to me. Persons who have not been recently vaccinated should submit themselves for vaccination without delay.

By Order,

MEDICAL OFFICER OF HEALTH.

Town Hall, Eccles.

Following the two cases on Christmas Eve and Christmas Day, a special meeting of the Health Committee was convened for the 27th December. Arrangements were then completed for the preparation and furnishing of a contact house suitable for the reception of any who might have to be removed while their premises were undergoing disinfection. A suitable place was found on the "Insanitary Area," the premises being those recently used as a common lodging house. It was first used on January 9th, 1903, for the reception of two families, one of which only remained there until the 12th, while the other stayed nearly three weeks.

It was again used for the reception of four contacts from the Patricroft common lodging house, but they only stayed one night, as they afterwards submitted to re-vaccination and were allowed to move on.

It was further used for the reception of a man who created a disturbance while your officers were carrying out the work of disinfection of his premises. He was locked up by the police, and rather than run any risk of infecting the cells, he was taken to the contact house and remained there one night. The following day he was taken before the magistrates and fined twenty shillings and costs.

Two deaths occurred, both being of adult males who had never been vaccinated. *There is no doubt as to this, as they were carefully inspected.* These cases were confluent small-pox, all the others being of the discrete form.

As each case was notified it was promptly removed to Mode Wheel, or in the later cases to Drinkwater Park. No time of the day was too late for the removal to be effected nor did the day make any difference. One case was removed on Christmas Eve, one actual case and one suspicious case on Christmas Day, and two cases were removed on Sundays. Seven other cases were removed between the hours of 7 o'clock p.m. and midnight.

Sixteen of the cases were reported by Medical Practitioners. The others were discovered as the result of a visit paid by the Chief Sanitary Inspector to a house in King street. In this house the wife of the tenant was found to be suffering from the disease, and upon communicating with the Medical Officer of Health for Salford, her husband was found to be suffering from small-pox, and still following the occupation of a brickmaker in that County Borough. His brother was examined by myself late the same evening, when I found him to be also suffering from small-pox.

MEASURES TAKEN TO PREVENT THE SPREAD OF THE DISEASE.

Removal of Patients and Disinfection of Premises.

Upon the report of a case, arrangements were at once made for the removal of the patient to hospital. As soon as the patient and all the infected clothing, etc., were removed, the process of disinfection was commenced and completed as soon as possible. In the cases of the common lodging houses assistance in this work was afforded by the contacts who were paid for the work.

The floors, walls and ceilings of all the rooms in the infected house were first sprayed with one per cent solution of "Chloros," the rooms were then hermetically sealed and fumigated with sulphur. Upon the rooms being opened the papers were stripped off the walls and they were then, along with the ceilings limewashed with freshly slaked lime to which was added a strong solution of "Chloros." The efficacy of such measures is proved by the fact that we have not had a further outbreak in the same house after the disinfection has been completed. The drains of each infected house were flushed with "Chloros" and the sewers in the affected streets were similarly treated. After the discovery of the cases in King street, the surface of that street was well flushed with a strong solution of "Chloros."

The ashpits and privies of the infected houses were promptly cleansed and disinfected.

Izal was freely supplied for personal and domestic use.

The following warning placard was posted throughout the Borough and renewed each fortnight. It was also posted in the common lodging houses and in all the mills and foundries in the Borough.

BOROUGH OF ECCLES.

SMALL-POX.

1.—Small-pox has appeared in this Borough.

2.—Small-pox is an infectious disease, and unprotected or incompletely protected persons coming into the presence of a person having Small-pox, are liable to be attacked.

Unprotected persons are those who have never been successfully vaccinated. Doubtfully and incompletely protected persons are those who have not been successfully vaccinated for some years. All persons should be completely protected.

3.—Successful vaccination is an absolute safeguard against Small-pox for some years, the period varying with the number and size of the marks from successful vaccination and with individual peculiarity. One small vesicle is inadequate, and should not be regarded as successful vaccination.

Vaccination is quite safe when performed with proper precautions

4.—Successful recent vaccination, or a previous attack of Small-pox, is the only adequate protection against an attack of Small-pox, when there has been exposure to infection.

5.—Reliance should not be placed on vaccination to protect against death from Small-pox if more than 20 years have elapsed since the last successful vaccination.

6.—A previous attack of Small-pox should not always be relied upon, as this disease is often confounded with Chicken-pox. Moreover, Small-pox does occur twice in the same person, though very seldom.

7.—The percentage of deaths amongst unvaccinated persons attacked with Small-pox is very high. It is also high amongst vaccinated persons attacked with Small-pox, if more than 25 years have elapsed since the last successful vaccination.

8.—All cases of Chicken-pox must be notified by the head of the house to the Medical Officer of Health.

9.—Mild cases of Small-pox usually begin abruptly with headache, fever and a sense of severe illness, often with pain in the back. After three days an eruption comes out on the face, and perhaps on the wrists, arms and legs. Usually, in mild cases, there is very little eruption on the front of the body. In mild attacks, after the eruption appears, there is no longer any sense of illness. When such an illness occurs, however slight the eruption may be, a doctor should be called in, or the case should be notified to the Medical Officer of Health by the householder.

No case either of Chicken-pox or Small-pox should be left without Medical attention. The slightest case of Small-pox may give rise to a fatal infection in others.

10.—You are strongly advised at the present time to protect yourselves and your family and dependents by vaccination and re-vaccination.

11.—Vaccination may be performed either by your own Medical Attendant or by the Public Vaccinator of your district. The latter will vaccinate free of charge.

MEDICAL OFFICER OF HEALTH.

When the cases occurred in King street the large Mission Room in that street was promptly closed and by the courtesy of the Rev. J. R. Bailey, the room was kept closed for fourteen days. I have also to acknowledge my thanks to the Vicar of St. Andrew's for his assistance. In one case which occurred in his parish, the patient although the rash had not come out, had been in Church on Sunday night. As we did not wish to create a panic, the following leaflet was drawn up by the Vicar and distributed :—

ST. ANDREW'S VICARAGE,

ECCLES.

Having been informed by the Medical Officer of Health, that a case of Small-pox has been discovered in St. Andrew's Parish, I am sending this warning to Parishioners, in the hope that it may induce those who have never been Vaccinated, or only once Vaccinated, to immediately make use of this preventive.

The Medical Officer informs me that it is urgently advisable that all persons attending any Public Places (such as Places of Worship, Day or Sunday Schools, or Places of Entertainment) should be immediately re-vaccinated.

I trust all Parents will seriously consider the grave responsibility they incur if they neglect this warning, and thereby leave their children in a state of susceptibility to infection.

(Signed),

ARTHUR C. THOMPSON,

Vicar of St. Andrew's, Eccles.

Jan. 28th, 1903.

CONTACTS.

In those cases where it appeared necessary all contacts were strongly urged to submit to re-vaccination. In the cases where this was carried out and where thorough disinfection had been completed they were allowed to follow their usual occupations. In those cases where such consent was not forthcoming their employment was restricted. In every case they were kept under daily observation for fourteen days after the removal of the patients.

Where such contacts were employed outside this Borough, the Medical Officer of Health for the district in which they were employed was informed of the circumstances. In this way we sent many communications re contacts and received a large number of such intimations respecting our own residents who had been in contact with cases outside.

The vaccination officer was communicated with as each case was reported. 1296 persons were vaccinated or re-vaccinated by the Public Vaccinator.

NOTIFICATION OF CHICKEN-POX.

Chicken-pox was made notifiable for six months ended September, 1902 Its notification was also required during the twelve months ending January 31st, 1904.

COST.

The cost of the epidemic has been £274 10 8d., made up as follows:—

	£	s.	d.
Maintenance of cases in Hospital	200	5	0
Disinfection of bedding	7	18	4
Food and other supplies to contacts, special disinfection expenses, &c.	66	7	4
	<u>£274</u>	<u>10</u>	<u>8</u>

It is interesting to note that no death occurred in a vaccinated person. Of the three cases in unvaccinated persons, two died. *No case occurred in any person showing four cicatrices.* No case occurred in a contact who had been re-vaccinated. One case occurred in an inmate of the lodging house at Patricroft who had been offered re-vaccination every night for six weeks but had always refused it.

It is evident that an alteration is necessary in the existing law to secure *efficient* vaccination (not less than four marks) in infancy. The insertion of lymph in only one or two places has been largely to blame for the discredit that has fallen on vaccination. The certificate given by the medical

practitioner should in all cases state the number and size of the vesicles produced and the *inefficient performance of the operation should be Penal*. Re-vaccination should be made compulsory at the age of twelve or fourteen years and the Medical Officer of Health should have power to re-vaccinate compulsorily all persons who have been in contact with a case of small-pox. Legislation is necessary for the effectual and systematic control and supervision of tramps.

With regard to re-vaccination experience abundantly proves, not only in the case of hospital nurses, medical attendants, and others who come much in contact with Small-pox, but also in that of large bodies of persons who have been systematically protected by vaccination and re-vaccination, abroad as well as in this country, that an attack of this disease after re-vaccination is so rare and so trivial when it does occur as to involve only an infinitesimal risk.

It has also been conclusively proved that, at primary Vaccination in infancy four well marked vesicles of at least half a square inch total area, will give absolute protection from Small-pox for the first ten years of life, and that three well marked vesicles of re-vaccination at puberty in addition, will probably carry that protection on for the remainder of the individual's life, and will certainly protect against death from Small-pox.

In October, 1902, before the incidence of any case in Eccles, a circular letter was sent to the keepers of the common lodging houses warning them to be on their guard if a case should appear, and asking them to report every case of sickness to the Medical Officer of Health. I have to gratefully acknowledge that during the epidemic I received every assistance from the keepers of the lodging houses.

When it was found that a patient suffering from Small-pox had travelled through or from another town, the Medical Officer of Health of each town was immediately informed and the addresses at which he stayed, given along with a description of the sufferer.

I have to thank the Medical Officers of Health for Manchester, Salford, and Stretford for especial assistance in this matter. The Medical Officers of some other towns gave similar information, for which I am grateful. In one instance however, the information was too vague to be of any value.

In addition to the common lodging houses, all houses let-in lodgings were kept under constant supervision.

During the course of the epidemic some of the teachers in the elementary schools made an "object lesson" of vaccination. As a result many

children obtained protection by being vaccinated. Messrs. Tyson, Phillips, and McIntyre, were especially commendable in this matter.

I cannot end this report without calling attention to the splendid devotion and untiring energy of your Health Staff. The Chief Inspector Mr. Laskey, worked early and late, his work was praiseworthy to the extreme and I cannot too highly commend his self sacrifice and faithfulness to duty. On one occasion—on Christmas Day, I had to have him fetched away as he was sitting down to dinner and could not spare him until midnight. Mr. Laws also worked hard, and for night after night assisted in the inspections of the inmates of the common lodging houses and the visiting and observation of contacts.

The benefit accruing to the town from sanitary work is not to be judged by things which have happened, but by what may have been prevented. No better example of this can be found than the case of the outbreak in King street. This street is eminently fitted for the spread of infectious disease. Four cases occurred in this street on January 9th. Twice that day the Chief Sanitary Inspector and myself, visited every house and for fourteen days we kept each house under observation. As the result of repeated visiting and persuading, after two days *every resident in the street* had been vaccinated or re-vaccinated. Owing to this, and repeated cleansings and disinfection, no further cases occurred in this street or in the crowded district in which it lies.

Finally I should like to bear testimony to the continuous support and assistance I received during this trying time from the Committee as a whole, but more particularly from the Chairman, Mr. Alderman Parr, J.P. His advice and assistance were always at my disposal and I know that the anxiety felt by the officials was equally shared by him. He was almost daily in attendance at the Town Hall, and it was re-assuring to have his energetic and sympathetic support.

VACCINATION.—There have been 1211 cases of successful Vaccination in the Borough during 1903. The number of Births was 1014; therefore the proportion of primary Vaccinations to infants born was very satisfactory.

I reported last year that the practise of making only one or two insertions of lymph only was very prevalent. I have reason for believing that there has been a decided improvement in this respect. It is to be hoped that, when dealing with the question of vaccination, the Government will insist upon the Medical Practitioner recording on the certificate of successful vaccination, the number and size of the vesicles, and on re-vaccination between the ages of 12 and 14.

No	Sex.	Age	Occupation	Date of onset.	Date of rash	Date of Notification	Removed to Hospital.	Vaccination Date.	Character	Re-vaccination.	Date of disinfection of premises	Date of recovery	Date of Death	Cost of maintenance
1	M	50	Tramp...	1/12/02	3/12/02	3/12/02	3/12/02	Infancy	.....	3/12/02	3/12/02	29/12/02	.....	£ s. d. 12 3 0
2	M	50	Tramp...	17/12/02	21/12/02	22/12/02	22/12/02	Infancy	.....	.....	22/12/02	5/1/03	.....	6 15 0
3	M	33	Tramp..	20/12/02	22/12/02	24/12/02	24/12/02	Infancy	.....	24/12/02	24/12/02	23/1/03	.....	13 19 0
4	M	30	Tramp...	23/12/02	25/12/02	25/12/02	25/12/02	Infancy	Fair	.....	25/12/02	17, 1/03	.....	10 16 0
5	M	32	Labourer, out of wk.	6/1/03	9/1/03	9/1/03	9/1/03	nil.	.....	9/1/03	9/1/03	.....	22/1/03	6 6 0
6	F	35	House-wife	3/1/03	7/1/03	9/1/03	9/1/03	Infancy	Fair	9/1/03	9/1/03	2/2/3	.....	11 5 0
7	M	36	Brick-maker	27/12/02	30/12/02	9/1/03	9/1/03	Infancy	Fair	.....	9/1/03	24/1/03	.....	7 4 0
8	M	22	Labourer	4/1/03	8, /03	9/1/03	9/1/03	Infancy	Good	9/1/03	9/1/03	24/1/03	.....	7 4 0
9	F	32	Domestic	7/1/03	10/1/03	11/1/03	11/1/03	Infancy	Fair	.....	11/1/03	5/2/03	.....	12 3 0
10	F	16	At Home	23/1/03	27/1/03	27/1/03	27/1/03	Infancy	Fair	27/1/03	27/1/03	11/2/03	.....	7 4 0
11	M	35	Labourer	.....	13/2/03	13/2/03	13/2/03	Infancy	Fair	.....	13/2/03	17/4/03	.....	28 16 0
12	M	18	Apprentice	26/2/03	1/3/03	1/3/03	1/3/03	nil.	.....	.....	1/3/03	17/4/03	.....	21 12 0
13	M	56	Labourer	6/3/03	9/3/03	12/3/03	12/3/03	nil.	.....	.....	12/3/03	.....	16/3/03	2 5 0
14	M	45	Agent	14/4/03	17/4/03	17/4/03	17/4/03	Infancy	Good	17/4/03	18/4/03	5/5/03	.....	8 11 0
15	F	21	Clerk	9/4/03	13/4/03	17/4/03	17/4/03	Infancy	Good	17/4/03	18/4/03	5/5/03	.....	8 11 0
16	M	26	Slater	1/5/03	4/5/03	5/5/03	5/5/03	Infancy	Good	.....	5/5/03	20/5/03	.....	6 15 0
17	M	48	Labourer	11/5/03	18/5/03	18/5/03	18/5/03	Infancy	Fair	.....	18/5/03	26/6/03	.....	18 0 0
18	M	25	Engineer	23/12/03	20/12/03	23/12/03	23/12/03	Infancy	Fair	.....	23/12/03	15/1/04	.....	10 16 0
														200 5 0

SCARLET FEVER.

The number of notified cases of this disease was below the average for the last three years, being 139, as compared with 191 for 1902 ; 148 for 1901 ; and 254 for 1900.

There were three deaths from this disease during the year. Several cases were of so mild a type that they were not recognised until the stage of desquamation was reached.

The following tables show the notifications and removals of scarlet fever, for each month during the years 1902 and 1903 :—

MONTH.	1902		1903	
	No. of cases Notified	No. Removed	No. Notified.	No. removed
January ...	14	7	17	1
February...	15	10	15	3
March ...	13	5	23	5
April ...	6	4	18	8
May ...	10	8	17	3
June ...	13	6	16	2
July ...	19	13	9	5
August ...	25	12	5	1
September	19	9	9	2
October ...	20	8	4	...
November	18	8	6	1
December	19	9	3	...
TOTAL....	191	99	139	31

Since the beginning of December, 1902, I endeavoured, owing to the imminence of Small-pox, to reduce the number of beds occupied by Scarlet Fever patients. As a consequence most cases of this disease have been isolated at home, as shewn in the preceding table for 1903.

Birmingham, Brighton, Huddersfield, Nottingham, and Northampton, all isolated over 74 per cent of their cases, the mean for these five towns being 81 per cent isolated, and the attack rate was 4.5 per 1,000. On the other hand Cardiff, Newcastle, Plymouth, and Sunderland, isolated only 25 per cent of their cases, but their attack rate is actually less than the good "isolators," averaging only 4.1 per 1,000 population. In only one large town in the kingdom has isolation been carried to such a height as in Birmingham, yet, after years of rigidly enforced isolation, the attack rate reached last year over 9 per 1,000 population.

If hospital isolation is as beneficial as we thought, it is only reasonable to believe that if a large town suddenly has its means of isolating taken away from it, dire results must ensue; and if, in addition, nearly 100 cases of Scarlet Fever should be dumped down in this town, denuded of its power of isolation, the result should be disastrous. Curiously enough, such an instance has actually occurred, no longer ago than at the beginning of this year. The isolation hospital of Leicester was closed on January 21st, in order to accommodate cases of Small-pox. Ninety-eight patients in all stages of Scarlet Fever were sent to their homes. Instead of a general outbreak of Scarlet Fever all over the town, the notifications actually dropped at once from 25 per week, which had been the average for the three months preceding the closure, to ten a week, and they remained at this figure for six months following the closure.

So far also from the 98 cases spreading the disease, only two return cases occurred. For the closure of the hospital to be immediately followed by a drop of 50 per cent in the attack rate, is very suggestive that isolation hospitals play a small part in preventing the disease. The fact that there were only two return cases calls to mind the result of the closure of the Leicester Hospital before, in 1891, when 144 cases of scarlet fever were sent back to their homes without a single return case.

In this connection I may also quote the experience of Oldham, another large town, which has tried an experiment of temporarily abandoning hospital isolation in scarlet fever. Owing to an outbreak of Small-pox, the Fever Hospital had to be reserved for that disease, and no cases of Scarlet Fever were admitted during 1892 and the greater part of 1893. Yet the disease fell off to such an extent, that during 1892-3-4, there was less scarlet fever

in Oldham than in any other three consecutive years during the 22 years for which the records exist.

These facts certainly suggest that the value of hospital isolation, in checking the spread of scarlet fever is less than is usually supposed. It is evident that the spread of scarlet fever, which, in some respects, seems to be more endemic than epidemic, depends on causes of which we, as yet, know little. There is no doubt that hospital isolation, devised and advocated under the idea that personal infection was the principal factor in the spread, has failed to accomplish what was expected of it.

In view of the above facts I suggested to the Committee that a system of selection in cases to be isolated should be adopted ; that cases which cannot be satisfactorily isolated at home, and cases in which the remaining at home would involve loss of work to the parent, should be removed.

This course has been adopted, throughout the year, and will be continued. The whole question of the value of Hospital Isolation, in scarlet fever, is under consideration by the Committee of the Incorporated Society of Medical Officers of Health, who will shortly report upon it.

DIPHTHERIA.

This disease was more prevalent during the year, 126 cases being notified as compared with 108 in 1902. The number of deaths was 23, which was equivalent to 18·2 per cent of the cases notified. The incidence of the disease according to age was :—

35 cases between 1—5 years.				
72	„	„	5—15	„
10	„	„	15—25	„
9	„	„	25—65	„

In 53 cases swabs were used for taking specimens from the throats of suspected cases, and forwarded to Professor Dèlepine for examination ; in 25 cases Diphtheria bacilli were found.

The disease was most prevalent in the months of January, February, and March ; 88 of the 126 cases notified occurred in these three months.

A severe epidemic of this disease prevailed in the district in the early part of the year in connection with one of the schools in the Patricroft

Ward. Nine cases of the disease had been notified during the latter part of December. One school was closed for holidays on December 18th, 1902. It was then thoroughly disinfected. During the holidays notifications of cases in children belonging to this school continued to come in. The school was kept closed until January 19th.

The following are the particulars of the notifications during this epidemic, showing the results in each case :—

Initial.	Age.	Date of Commencement	Date of Notification.	Where Isolated	Date of Recovery.	Date of Death
E.S.	7	29/11/02	1/12/02	Hospital	23/12/02	
T.B.	4½	1/12/02	2/12/02		23/12/02	
M.B.	7	7/12/02	9/12/02	„	3/1/03	
C.J.P.	8	11/12/02	15/12/02	Home	...	16/12/02
S.B.	7	17/12/02	18/12/02	„	3/1/03	
A.D.	7	21/12/02	22/12/02	Hospital	12/2/03	
F.A.C.	6	20/12/02	23/12/02	„	17/1/3	
T.W.	12	23/12/02	24/12/02	Home	7/1/03	
J.B.	7	24/12/02	29/12/02	Hospital	...	30/12/02
H.L.	4	30/12/02	2/1/03	Home	...	3/1/03
A.J.	5	31/12/02	1/1/03	Hospital	...	4/1/03
W.D.	9	7/1/03	9/1/3	Home	22/1/03	
G.P.	8	10/1/03	11/1/03	Hospital	...	14/1/03
A.N.	9	12/1/03	13/1/03	„	2/2/03	
N.P.	27	12/1/03	14/1/03	Home	5/2/03	
C.B.	7	11/1/03	14/1/03	Hospital	6/2/03	
D.H.	9	20/1/03	22/1/03	„	6/2/03	
M.S.	12	22/1/03	24/1/03	Home	18/2/03	
C.M.P.	7	24/1/03	26/1/03	Hospital	18/2/03	
F.H.L.	6	22/1/03	26/1/03	„	14/3/03	
J.C.	7	24/1/03	26/1/03	„	14/2/03	
A.M.	7	25/1/03	26/1/03	„	19/2/03	
A.H.	8	25/1/03	27/1/03	„	23/2/03	
J.S.	7	25/1/03	27/1/03	„	18/2/03	
S.T.	6½	26/1/03	27/1/03	„	10/3/03	
R.R.	5	25/1/03	27/1/03	„	4/4/03	
W.C.	9	27/1/3	29/1/03	„	28/2/03	
M.M.	8	27/1/3	29/1/03	Home	10/2/03	
N.R.	4	27/1/3	30/1/03	„	15/2/03	
HMcV	4	1/2/03	2/2/03	Hospital	26/3/03	
N.C.	9	27/1/03	3/2/03	Home	23/2/03	
R.B.	7	2/2/03	3/2/03	Hospital	...	7/2/03
P.B.	10	6/2/03	7/2/03	„	28/2/03	
M.K.	11	27/1/03	27/1/03	Home	23/2/03	
J.S.	11	19/2/03	21/2/03	Hospital	14/3/03	
E.R.	4	20/2/03	23/2/03	„	.....	2/3/03
R.S.	4	15/3/03	16/3/03	Home	4/4/03	

In connection with this epidemic, it is interesting to note that the street facing the school was in an unpaved condition, having been broken up for

sewering and paving purposes. I have frequently noticed that Infectious Diseases, especially scarlet fever and diphtheria, occur in houses abutting on unpaved streets.

Dr. Bruce Low, reporting on a recent epidemic of diphtheria, attributed the outbreak to the disturbance of soil contaminated with night-soil.

On January 19th, the school was re-opened, but, between that date and January 26th, ten other cases were reported. I reported this to the Committee, and by their instructions, I obtained the assistance of two other medical men, and on January 27th all the children in attendance at this school were examined. Many children were found to have inflamed throats, and "swab specimens" were taken from 9 suspicious cases. Three of these were found by Professor Delèpine to be suffering from true diphtheria. One child notified at noon on January 26th, as suffering from diphtheria, had been in school that morning.

It had been intended to allow the school to re-open on February 9th, but seven cases having been notified since January 28th, of scholars in connection with this school, the school was kept closed for a further period of a week, *i.e.*, up to February 16th.

ENTERIC FEVER.

Sixteen cases of this disease were notified during the year, as compared with 33 for 1902, and 54 for 1901.

There were 3 deaths from the disease, 1 between 15 and 25 years of age; and 2 between 25 and 65 years of age.

Seventeen specimens of blood were forwarded to Professor Delèpine for bacteriological examination, and in six cases a positive re-action was obtained.

In three of the cases notified the infection was definitely traced to the eating of shell-fish.

In all cases of this disease treated at home, special pails for the reception of the fæces and urine are supplied and frequently cleansed and disinfected. The use of these pails has had a marked effect on the number of cases of this disease occurring in the Borough. Before their introduction, the dejecta were emptied into the privy pits, and became a source of infection especially when the pits were emptied.

DIARRHŒA.

Eleven deaths from this disease were registered during the year, as compared with 8 for 1902, and 51 for 1901. Ten of these deaths were children under five years of age.

MEASLES.

Eight hundred and thirty-one cases of this disease were notified by the teachers of the public schools in the Borough, of these fifteen proved fatal. The greatest prevalence was during the months of February, March, April, and May.

Five schools were closed for a period varying from two to three weeks, on account of this disease.

The particulars of the schools closed will be found on page 6.

The following handbill was prepared, and distributed at each house in the Borough :—

MEASLES.

This Disease is again prevalent in the Borough, and already several deaths have occurred from it.

There are more deaths every year from Measles than from Scarlet Fever. The disease is most fatal in the Winter and Spring owing to the neglect and carelessness of the parents in allowing the child to run about out of doors, before or after the rash, under the mistaken idea that the disease is not dangerous.

Put the child at once to bed, and take the same care and precautions as you would with Scarlet Fever, and you may save your children,

MEASLES IS A FEVER.

The disease begins like a cold in the head, with dry cough, running from the nose and eyes. The child is poorly and slightly feverish at night. After four days the rash comes out, generally first on the face or behind the ears. The rash remains out three or four days, and then fades. Usually as the rash fades the cough gets worse, and this is the most frequent time for complications such as Bronchitis, Pneumonia, and other Chest Diseases DUE TO COLD, to develope. The child should be kept in bed until the cough has disappeared. If the eyes are very red, keep the child in the dark.

Isolate the child as soon as the early symptoms—cough, running at the nose and eyes, feverishness—are perceived. The disease is most infectious during this stage, but it is also infectious for fourteen days after the rash has appeared; therefore isolation must be continued for that period, and the other children, if any in the house, kept away from day and Sunday schools. The contagium is given off from the skin and breath, and clings persis-

tently to clothes, hence the disease is spread more by contact of one child with another than by air. The mortality in this disease is directly proportionate to the age of the child; the older the child, the better chance it has of recovery.

Bronchitis, Pneumonia, Croup, Diarrhæa, a liability to Consumption, Inflammation of the Kidneys, even in mild cases, follow on the disease if the child is not protected by being kept warm in bed.

CHICKEN-POX.

Owing to the imminence of Small-pox this disease has been notifiable during the whole of the year. One hundred and forty cases were notified from the schools. Ninety-two cases of the disease have been notified by the medical men. Each case is visited and a copy of the instructions for the prevention of infectious disease is left at the house.

WHOOPIING-COUGH.

Twenty-nine cases of this disease were notified by the schoolmasters, as compared with 281 for the year 1902. There were two deaths, both under the age of five years. In each case the house was visited, and a precautionary leaflet was left with the parent.

INFLUENZA.

This disease was prevalent in a mild form in the latter part of the year. Two deaths were registered from this disease, as compared with three last year.

ERYSIPELAS.

Twenty-one cases of this disease were notified, with two deaths, as compared with 33 cases and three deaths for 1902.

PUERPERAL FEVER.

Two cases of this disease were notified, of which one was fatal as compared with five cases for 1902, all of which were fatal.

PHTHISIS.

Fifty-four deaths from phthisis and other tubercular diseases were registered during the year. The death-rate from pulmonary phthisis was '92 per 1,000 per annum. as compared with '8 for 1902.

The total death-rate from tuberculosis was equivalent to 1·5 per 1,000 per annum. It has been established beyond question that this disease is entirely preventible. The infection is from the dried sputum, and also from the mucous and vapour given off by the cough. In view of this fact, and considering the extreme gravity of the disease, it is to be regretted that the medical men do not more generally assist the Health Authority in its endeavour to check the spread of the disease by giving the necessary information to be obtained by the notification of each case. Unless the case is notified, the Health Authority has no source of information of the existence of a case, and consequently cannot point out the precautions to be taken or carry out the necessary disinfection.

Notification was adopted in September, 1901. Thirty-four cases only have been notified during the year. Of these 18 have died. On receiving notification of a case of phthisis, the case is at once visited by one of the staff, the premises are thoroughly examined as to drainage, ventilation, light ; and any sanitary defect is reported to the Health Committee.

A copy of the following form is given to each patient, and its meaning carefully explained.

INSTRUCTIONS TO PERSONS SUFFERING FROM CONSUMPTION.

1. It has been abundantly proved that "phthisis" or "consumption" is an infectious disease, and is infectious by means of the sputum.

2. The way in which phthisis is usually spread from one person to another by means of the sputum is as follows :—

(a) A consumptive patient coughs up a quantity of sputum, in which are enormous numbers of the specific germs.

(b) The sputum lodges where it is spat on, and there dries ;

(c) When dried, the sputum is usually pulverised and floats in the air as dust.

(d) The germs contained in the sputum, though dried, are still living, and able to infect the air in which they are suspended ;

(e) The infected air when breathed is liable to cause phthisis. This is more particularly true of people who are already suffering from phthisis, and whose recovery is thus prevented.

3. Great care must therefore be used, so that the sputum is not discharged on any spot or into any substance on which it can be dried and subsequently broken into dust.

It must, therefore, not be discharged on the floor or walls of any living room, workshop, meeting room, theatre, or other confined place in which people assemble. It must not be discharged into a pocket handkerchief carried in the usual manner, since it readily dries in such a situation, so that not only are the clothes infected, but when the pocket handkerchief is again used, a cloud of infective dust is scattered around you.

4. There are various ways in which this danger may be avoided.

At home you should spit into a piece of paper or clean rag, carefully clean your mouth with it, and then throw the soiled rag or paper on the back of the fire.

If there is no fire you should spit into a cup containing water, which must be emptied once a day into the drains outside the house, and then thoroughly cleansed with boiling water before being again used.

Outside the home you should carry a number of pieces of soft tissue paper, preferably oiled, and when you must spit use one of these, folding it after use so that the sputum is right in the centre of it, when it will not dirty the pocket. Use one pocket for the unused papers and another for those which have been used.

Or you may carry a pocket spittoon charged with moistened blotting paper. This may be readily obtained at any chemists, or made. It is essential that the lid should fit tight, and that the spittoon should be kept clean.

5. All persons who have a chronic cough and spit should carry out the above precautions, and it is also advisable that they consult their medical attendant without delay.

6. Consumptives should not kiss on the lips.

The eating utensils which they have used should be at once thoroughly cleansed before further use.

7. If these precautions are strictly observed, a consumptive person runs no risk whatever of infecting others, and adds considerably to his own chances of recovery.

8. The sleeping room of a consumptive should be kept rigorously clean.

If by any chance the pillows or bedclothes have been soiled with sputum they should be at once disinfected by steam, or washed with boiling water.

Dust should not be allowed to accumulate anywhere in the bedroom. The room should be kept well aired, and the bedroom window should, whenever possible, be kept slightly open.

9. Persons who have contracted consumption, or who have a family history of the disease, should not live or sleep in a room which is damp, crowded, badly lighted, or badly ventilated.

10. It will often happen when a consumptive person's attention is first called to these rules that a considerable amount of infected dust will have collected in the rooms which he has occupied. These must be carefully disinfected.

Articles, including wearing apparel, carpets, hangings, bed clothes, and mattresses, which admit of such treatment, will be disinfected by the Corporation free of charge. Articles which admit of washing with boiling water may be so washed. Other articles, as well as the floor, walls, and ceiling, should be thoroughly cleaned down with a disinfectant, and the Corporation will do this work if requested. Where the work is done by the householder, directions will be given in each instance of the precise degree and kind of disinfection necessary.

Having once got the rooms quite clean, it becomes easy though necessary, to keep them so. In order to effect this, the floors and skirtings of rooms used by consumptive persons should be thoroughly cleansed with soap and water at least once a week, and at all times the rooms should be kept free from dust. It is always desirable in dusting a room to moisten the floor with tea leaves or otherwise, and to use a damp duster to other parts of the room. In this way one makes sure of not scattering infectious dust in the air of the room. This is especially necessary in a room occupied by a consumptive whose lungs are, moreover, likely to be injured by the dust left in the room.

11. The walls ought to be rubbed down with dough every three months.

12. The most essential thing in preventing the spread of this disease, and in aiding the recovery of the consumptive person, is extreme cleanliness in his person, and in the living and sleeping rooms used by him, with special attention to the points mentioned in this paper.

The safety of your family and of your workmates, as well as your own chances of recovery, depend upon your following these rules.

Disinfection is offered at the time of the first visit, and if the people agree will be carried out every three months. Should the patient die, or remove, the premises are at once disinfected.

Arrangements have been made with Professor Delépine for the bacteriological examination of sputum at the cost of the Corporation, and small sterilised tins in which to collect the sputum can be obtained from the office. It is gratifying that this privilege is being largely taken advantage of by the medical practitioners in the borough.

The provision of spitting cups has been decided on by the committee, and a supply of these is kept at the Public Health Office.

The Eccles Corporation Act, 1901, Sec. 117, provides that—

Every person who knowingly sells, or suffers to be sold or used for human consumption within the Borough, the milk of any cow which is suffering from tuberculosis of the udder, shall be liable to a penalty not exceeding ten pounds.

By the direction of the Committee, I prepared the following notice card:—

CONSUMPTION.

NOTICE AS TO SPITTING.

Do not spit on the floors or walls. Those who do so endanger the lives of their fellows. If obliged to spit go outside. Do not use an ordinary pocket handkerchief. It is by means of dried spittle that consumption is commonly spread. If there is a fire you may spit in a piece of paper, which should be at once burned.

This card, along with the following letter, was sent to all public houses, clubs, schools, the theatre, and other public places in the Borough :

Dear Sir,

It is now generally recognised that consumption is a communicable disease, and that it is communicated in the following manner—The matters coughed up by consumptives contain the infectious material. If this matter is discharged on the floor of a confined space where it can become dry and be broken into dust, the dust is inhaled by others, and causes their lungs to be attacked by the disease.

This is especially liable to occur in the public rooms.

The danger requires to be met in two ways : By preventing as far as possible the floors and walls of the public rooms from being contaminated with

spittle, and by frequent cleansing of the floors and walls of public rooms at regular intervals with soap and water.

There is also considerable danger from the use of ordinary pocket handkerchiefs by consumptives, as infectious matter deposited in these gets dried, and scatters as an infectious, invisible cloud every time the handkerchief is used.

I am requested, therefore, by the Sanitary Committee to ask you by every means in your power to endeavour to prevent infection being conveyed in your public rooms, and, in particular, to suspend in your public rooms the enclosed placard.

You will observe that no mention is made of spittoons in the placard. The ground around spittoons is so often found soiled with spittle that they cannot be relied upon as a safeguard.

THE MEDICAL OFFICER OF HEALTH.

Thirty-six specimens of sputum were sent to Professor Delépine for bacteriological examination. In 15 cases tubercle bacilli were found.

INFANTILE MORTALITY.

The problem of the Infantile Mortality has occupied the Committee's serious attention during the year. The number of deaths of infants under one year was 123. This gives a death-rate of 121 per 1,000 registered births, as compared with 112 per 1,000 for 1902. The death rate was highest in Irwell and Barton Wards, as the following table will show :

Irwell Ward	...	226	per 1,000 registered Births.		
Barton „	...	170	„	„	„
Eccles „	...	105	„	„	„
Winton „	...	105	„	„	„
Patricroft Ward	...	100	„	„	„
Monton „	...	42	„	„	„

It will thus be seen that the rate varies from 226 to 42. This points to a terrible waste of life. That a high death-rate is not a necessary concomitant of class conditions is shown by the low rate in Eccles and Patricroft Wards. Both these wards contain an essentially working-class population, and the density of population is much greater than in Irwell and Barton—the density per acre being : Eccles 48·4 ; Patricroft 41·9 ; Irwell 30·8 ; and Barton 14·9—so that the high rate is not due to overcrowding. For the month of September the rate for Irwell Ward was 411 per 1,000, and for the month of December it reached the appalling rate of 461 per 1,000. Dr. Sergeant, in his Report for 1902, says “ the causes of a high infant mortality are to a large extent remediable, and it ought to be considered disgraceful to any authority to tolerate a rate exceeding 100 deaths under one year per 1,000 births, while a very much lower rate might reasonably be expected. Filthy environment, and the wide-spread ignorance of mothers of the elementary principles which ought to guide them in the feeding, clothing, and management of their young children, are productive of an immense loss of life, which goes on year after year, unheeded by the public.”

With a view to reducing this rate, the Health Committee issued a leaflet on Infant Feeding, which is given below. Copies of this are distributed by the Registrar of Births, a copy being given to each person registering a child. Several of the clergy have circulated the leaflet with their magazines, and some of the milk-shops have aided in the distribution.

It is felt that something more will have to be done to make the instructions more generally understood. With this object, the Committee is at present endeavouring to form a Ladies' Health Society. The assistance of the clergymen of the various religious denominations has been asked, and they have been requested to furnish the Committee with the names of two or more ladies who would be willing to undertake the work. Already the names of several ladies have been received, and when the list is completed they will be called together, and the plan of campaign discussed. The leaflet issued by the Committee might be used as a guide to the instruction to be given; the mothers could be impressed with the importance of cleanliness as regards the storing of the milk in the house, clean bottles and victuals, the quality of the food, and the regularity of feeding; the cleanliness of the child, suitable clothing and fresh air. As regards the quality of the milk, the interests of the farmers and milk sellers are identical with the consumer. Large quantities of condensed milk (a form very common with the poorer people on account of its cheapness) and various forms of dried milk, with additions of malt and starch, are imported and used as infant food. Fresh milk from healthy cows should be the only artificial food used. Of course, when possible, breast feeding should be adopted. Sterilization of milk in municipal depots has been of very great value in towns in which it has been adopted.

HOW INFANTS SHOULD BE FED.

The instructions given below are only to be acted on when no directions have been given by a medical man.

1. Infants should be *fed at the breast alone for a period of not less than six months or more than ten months*. Any other form of milk should not be given, except on the advice of a medical man.

2. Infants should have the breast during the first three months, not oftener than every two hours during the day, and every four hours during the night. At the end of three months they should be suckled at longer intervals. When they are fretful or suffer from indigestion, it will often be found that they are being overfed, and diminishing their diet will put them right.

3. The mother should, in order to supply wholesome milk to her child, partake only of plain and wholesome food, avoiding absolutely alcoholic stimulants, condiments, etc, and should lead a healthful life. If she suffer from sore nipples, they should be washed with warm water after every time the child has been fed, and glycerine or methylated spirit should then be applied to them.

4. When from want of milk or other absolutely necessary cause, a mother cannot suckle her infant, she should feed it on fresh cow's milk prepared thus :

(a) *Diet up to age of 6 weeks.* Half a pint of good fresh milk and one pint of water, with a small teaspoonful of white sugar, should be mixed and boiled, and then placed in a clean jug, covered with a clean cloth. Four tablespoonfuls of this should be placed in the feeding bottle each time it is used; and after each time the child has been fed, the bottle should be most thoroughly cleaned. The infant should not be fed oftener than every two hours during the day, and every four hours during the night.

(b) *Diet for a Child 6 weeks to 3 months old.* The milk may be gradually made stronger until one pint of cow's milk is added to one pint of water, and boiled and treated as above. The amount at each feeding should be increased until eight tablespoonfuls are put into each bottle; the intervals between the meals being also increased.

(c) *Diet for Child 3 to 6 months old.* The strength of the milk may be increased until two pints of cow's milk are mixed with one pint of water, boiled and treated as above. About eight tablespoonfuls should be given at each meal. The quantity however and the interval between the meals are to be increased as occasion requires, but it is necessary always to bear in mind the danger of overfeeding.

N.B.—Up to the age of six months no other food than milk should be used. On no account should bread and water "Pobbies," or other solids be given.

(d) The Bottle used should be that known as the Boat-shaped Bottle. Bottles having a tube cannot be efficiently cleansed. The Bottle should be cleaned with water containing Bi-Carbonate of Soda, the teat should be turned inside out, and also cleansed.

5. Table showing how much an Infant should be given at a time and how often.

	How often in Day.	How often in Night.	How much.	Strength.
From Birth to Four weeks old.	Every 2 Hours.	Every 4 Hours.	4 tablespoonfuls.	One-third milk.
From Four to Eight weeks old.	Every 2½ Hours.	Ditto.	6 tablespoonfuls.	One half milk.
	Increasing gradually			
From Three to Six months old.	Every 3 Hours.	Twice.	8 to 16 tablespoonfuls.	Two-thirds Milk to Pure milk.
From Seven to Twelve months old.	Five meals a day. Three of 12 tablespoonfuls of pure milk and two of 12 tablespoonfuls of milk thickened with baked flour bread, or prepared food, and boiled.			

Diet of a child from 12 to 18 months old.

First meal, 7 a.m. Bread and milk, or oatmeal, or hominy porridge, with plenty of milk,

Second meal, 11 a.m. Twelve tablespoonfuls of milk.

Third meal, 1-30 p.m. Bread crumbs and gravy, or a lightly boiled egg and bread and butter.

Fourth meal, 5-30 p.m. Bread and milk.

Fifth meal. Milk to drink.

All milk should be sweetened with sugar, (milk sugar, if possible).

6. When condensed milk is used, mothers should be careful to obtain only the best brands, and the unsweetened milk should be preferred. They should carefully examine the labels on the milk tins, as, by the Sale of Food and Drugs Act, all condensed milk not made from whole milk must have attached the words "Machine-made milk," or the words "skimmed milk" in legible characters.

7. Infants should not be placed on the floor, as they are thus exposed to draughts and infectious dirt.

8. They should be warmly clothed, but not with many clothes. Their clothing should not fit tight about the body, but cling loosely so as to give free play to the lungs. The limbs should be covered equally with the body. Flannel should be worn next the skin,

9. Mothers are strongly warned against giving children teething powders, or soothing medicines to send them to sleep.

10. When an infant continues to suffer from indigestion or Diarrhœa, in spite of every care in feeding, the mother should consult a medical man, who will advise her how to act,

11. It cannot be too strongly impressed upon mothers that young infants can be much more easily prevented from disease by careful dieting and management than they can be cured when disease actually occurs.

Copies of this leaflet can be obtained at the Health Office, Town Hall.

SCHOOL HYGIENE.



The fusion of education and sanitary authorities offers a unique opportunity for fresh departures in the administration of the hygiene of schools. In the case of most authorities the new powers are a resultant of the recent Education Act, and the abolition of the dual control of the School Board, but the Eccles Corporation Act, 1901, Sec. 132, confers power on the Medical Officer of Health, to enter any Public Elementary School within the Borough at all reasonable times and examine the scholars attending the same and, empowers him to exclude from attendance thereat for such period as he may consider requisite any scholar who in his opinion is suffering from any infectious disease or is likely to spread infection. This clause is known as the "Eccles Clause."

It is generally recognised that in respect to the health of school children a serious responsibility devolves on the health authority as attendance at school is compulsory and, as it is the duty of the Corporation to see that parents send their children to school, it is equally their duty to (1)—insure that children do not attend school while suffering from infectious disease or while liable to carry infection. (2)—To insure that children are physically fit for compulsory attendance to be enforced without the production of bodily or mental suffering or injury, and that the curriculum is so arranged as the state of the child may require. (3)—To insure that the school premises shall be in such a condition as shall not be detrimental to the health of the children.

It is well known that the part played by school attendance in the spread of infectious disease is very large. Apart from the amount of sickness occurring amongst those attending school, epidemics of such diseases as Measles, Whooping Cough, and Diphtheria are frequently to be traced to a child who has been infected at school, and deaths under three years of age are not seldom the result of infection from an older child. It is in this indirect way, that school epidemics of Measles and Whooping Cough

mainly arise. No effort should be spared to minimise the influence of schools in this direction.

In the case of the Notifiable diseases—Scarlet Fever, Small-pox, Diphtheria, Enteric, and Erysipelas, early information will generally be derived from the certificate which the medical attendant is bound to forward to the sanitary authority.

But when dealing with these diseases satisfactory results will not be obtained unless notification be supplemented by measures which will lead to the discovery of the slight unrecognised cases which are, probably, responsible for the majority of school epidemics. All teachers should therefore be trained to look out for, and recognise, the early symptoms of these diseases. It is not expected that teachers should be able to diagnose the various diseases, but they might readily acquire enough knowledge to suspend from attendance children attacked with sudden vomiting and headache, or complaining of sore throat or exhibiting enlarged cervical glands. In other words to treat as suspects, children for whom a rational parent of the better class would seek medical advice. This has already been done to some extent by means of the cards, (a copy is given) which are hung up in the school, but much more could be done by regular and systematic training of the teachers in hygiene. The teaching of elementary hygiene should be compulsory in the higher standards. This could be easily done by means of a suitable reader. In this way all children would be led to appreciate at their true value, healthful bodily conditions, as regards cleanliness, pure food, pure air and drink. Such teaching is given extensively in the United States and in our Colonies. Every suspect discovered by the teacher or by the School Attendance Officer, should be referred to the Medical Officer and excluded from school. On exclusion the parents should be notified of the reason and urged to seek medical advice.

Periodical medical inspection of schools is most necessary, but daily inspection of the many hundreds of children attending the schools in the Borough, could only be a perfunctory performance. If, however, the schools were periodically inspected and instruction given, as was suggested above, to the teachers in hygiene and the early symptoms of infectious disease, a vast amount of sickness could be prevented by the early discovery of mild or incipient cases. I believe a large amount of the money now spent in isolation could in this way be saved and a vast amount of suffering prevented.

In special cases such as the epidemic of Diphtheria (page 43) in January the epidemics of Measles which occurred during the Spring, a detailed and individual examination of each child was made, with the result, I am convinced, of checking the disease. I should like to state here that I have received the most uniform assistance from the teachers in the Borough in these efforts to control epidemics. The information received from the schools has been invaluable, and to illustrate how the work is increasing, it may be mentioned that the number of visits paid by the Inspectors to school notifications was 1216 for the year, as compared with 1042 for 1902, 939 for 1901, and 314 for 1900.

The instructions to the Inspectors are on visiting these cases to first of all enquire if a doctor is attending. If the answer is affirmative no further steps are taken, if not, the case is investigated by the Inspector, and if he think it necessary, it is brought under the notice of the Medical Officer of Health for examination.

In the case of the non-notifiable diseases—Mumps, Measles, Chicken-pox, Scabies, Pediculosis or Impetigo Contagiosa, the Health department is entirely dependent on school notification. This information should be supplemented and followed up by Medical Examination.

Ringworm might be dealt with as is done in Bradford, by establishing special classes, and providing tightly fitting skull caps. This disease is generally so chronic in its course, that it seems a pity to exclude a child for a long period—generally seven weeks—when it is otherwise quite capable of attending school. Those affected with this parasitical disease must be kept under strict observation to prevent them from playing with the other children and, a very usual habit with boys, interchanging caps.

The question whether the Education Authority should pay for the Medical Attendance on Ringworm cases is worthy of consideration. These cases generally occur in the children of the very poor, who cannot afford medical attendance, and the time spent in waiting their turn at the Hospital would be much better spent at School. Similar classes might be established for cases of eczema—a disease very prevalent in the poor districts. Verminous children might be treated by the Medical Officer but should be rigidly excluded while affected. Ophthalmia is rare in this Borough, but children affected with it should be in all cases excluded.

It is the duty of the Authority to see that all children are physically fit for school. Anæmia, slight chorea, evidences of over-pressure, defects and diseases of the special senses of hearing and sight, should be at once attended to. The teachers should be instructed to bring all cases of ear discharge under the notice of the Medical Officer. Each child should have its eyesight tested. Many cases of stupidity and dulness in children are due to errors of refraction and deafness. The parents of children suffering from Adenoids, should be advised to have them treated as soon as possible, and the association of deafness with Adenoid disease should be impressed on the teachers. Many children are punished for inattention who are absolutely incapable of progress through this disease.

As regards the school buildings, some of these are unhealthy by overcrowding, insufficient ventilation, insufficient cleansing, and imperfect lighting. Opportunities for the application of sanitary knowledge in school life are very many. The unconscious lessons which children learn from their surroundings cannot be exaggerated. The class rooms should be bright, clean and well-lighted.

The privy middens should be altogether abolished, *both at school and at home*. In this respect the Corporation is doing good work. All the privy middens in connection with schools, have been, or are about to be abolished. The cloak rooms and lavatories should always look clean, and be clean. The slates should be washed daily in Izal solution (this has been done for some time at the Monton Memorial School) and the sponges used for cleaning slates should be frequently disinfected in Izal. The cubic space for each child should be increased. Classes especially in the Infants' Department should be smaller, and last but not most important of all, day sweeping should be prohibited in order to prevent the possible dissemination of tubercle bacilli from children affected with Phthisis spitting on the floor—and the female teachers should not wear long trailing dresses.

Should a child suffering from Phthisis be in the school and have coughed and expectorated on the floor, the bacilli dry and become pulverized. It will readily be understood that if the floor is swept without sprinkling, or a long dress trails over it, that the fine dust is disseminated through the air, and fresh cases of this fatal disease may develop.

The following is a list of the Schools closed, showing the cause and period of closure, during 1903 :—

Name of School.	Period Closed.	Cause.
Patricroft Higher Grade	Jany. 3rd—19th	Diphtheria
" " "	Jany. 27th—Feb. 15th	"
Christ Church School	May 2nd—16th	Measles
Eccles British (Infants)	Feb. 23rd—Mar. 9th	"
Barton Wesleyan	Apl. 13—May 4th	"
Monton Memorial (Infants)	Apl. 23—May 11th	"
Eccles Parish (Infants)	June 11th—29th	"

DISEASE.	Quarantine to be required after last exposure to infection.	Earliest date of return to school after an attack.
SCARLET FEVER	14 days	8 weeks, and then only if no desquamation or sore throat.
MEASLES	16 days	3 weeks, if all desquamation and cough have ceased.
RÖTHELN, OR GERMAN MEASLES	16 days	2 to 3 weeks, according to the nature of the case.
SMALL-POX	18 days	When all scabs have fallen off.
CHICKEN-POX	18 days	Ditto.
DIPHThERIA	12 days	3 weeks, if convalescence be complete, and no sore throat remain.
WHOOPING COUGH	21 days	6 weeks from commencement of whooping, if spasmodic cough and whooping have ceased.
MUMPS	24 days	4 weeks, if all swelling has sub- sided.
RINGWORM OPHTHALMIA SCABIES OR ITCH ECZEMA		When all traces of the respective diseases have disappeared.

FOOD AND DRUGS ACT.

* Return showing the number and nature of samples taken in the Borough under the Food and Drugs Act during the year 1903.

No	Nature of Sample,	Result of Analysis	Remarks.
1	Sweets	Genuine ...	
2	Sweets	Do. ...	
3	Sweets .. .	Do. ...	
4	Butter	Do. ...	
5	Butter	Do. ...	
6	Milk	Do. ...	
7	Milk	Do. ...	
8	Milk	Do. ...	
9	Milk	Do. ...	
10	Milk	Do. ...	
11	Butter	Slightly deficient in butter fat, by excess of salt	
12	Sugar	Genuine ..	
13	Arrowroot .. .	Do. ...	
14	Ground Ginger ...	Do. ..	
15	White Pepper .. .	Do. ...	
16	Butter	Do. ...	
17	Butter	Do. ...	
18	Butter	Do. ...	
19	Butter .. .	Do. .	
20	Butter	Do. ...	
21	Beer .. .	Do. ...	
22	Beer	Do. ...	
23	Milk	Do. ...	
24	Milk	Do. ...	
25	Milk	Do. ...	
26	Milk	Do. ..	
27	Milk	Do. ...	
28	Butter .. .	Do. ...	
29	Butter .. .	Do. ..	
30	Butter .. .	Do. ...	
31	Butter .. .	Do. ..	
32	Butter .. .	Do. ...	
33	White Pepper ...	Do. ...	
34	Scotch Whiskey ...	Do. ...	
35	Irish Whiskey .. .	Do. ..	
36	Irish Whiskey .. .	Do. ...	
37	Coffee	Do. ...	
38	Coffee	Do. ...	
39	Cocoa .. .	Do. ...	
40	Milk	Do. ...	

Samples and Analyses taken under Food & Drugs Act (continued).

No.	Nature of Sample.	Result of Analysis.	Remarks.
41	Butter	Genuine	
42	Cheese	Do.	
43	Milk	Do.	
44	Cheese	Do.	
45	Butter	Do.	
46	Milk	Do.	
47	Milk	Do.	
48	Milk	Do.	
49	Milk	Do.	
50	Milk	Do.	
51	Milk	Do.	
52	Milk	Do.	
53	Milk	Do.	
54	Milk	Do.	
55	Milk	Do.	
56	Milk	Do.	
57	Milk	Do.	
58	Milk	Do.	
59	Milk	Do.	
60	Butter	Do.	
61	Raspberry Jam ...	2 $\frac{3}{4}$ grains salicylic acid	Case not yet disposed of.
62	White Pepper ..	Genuine [per lb	
63	Coffee	Do.	
64	Butter	Do.	
65	Mustard	Do.	
66	Beer	Do.	
67	Beer	Do.	
68	Beer	Do.	
69	Beer	Do.	
70	Beer	Do.	
71	White Pepper ..	4 $\frac{1}{2}$ per cent sand & oxide	Case not yet disposed of.
72	Tea	Genuine [of iron	
73	Butter	Do.	
74	Scotch Whiskey ...	Do.	
75	Irish Whiskey ...	Do.	
76	Rum	Do.	
77	Scotch Whiskey ...	Do.	
78	Milk	17 pts. of water added to [every 100 of milk	Case not yet disposed of.
79	Milk	Genuine	
80	Milk	Do.	
81	Butter	Do.	
82	Cheese	Do.	
83	Butter	Do.	
84	Cheese	Do.	
85	Sweets	Do.	

* Kindly furnished by Mr. Superintendent KEYS

SECTION V.

—O—

ORDINARY SANITARY WORK OF THE HEALTH
DEPARTMENT.

SECTION V.

Ordinary Sanitary Work of the Health Department.

STAFF.

CHIEF INSPECTOR	...	...	C. W. LASKEY.
ASSISTANT „	...	...	G. LAWS.
DISINFECTOR, &c.	...	...	W. CROMPTON.

INSPECTION OF DISTRICT.—There were 4581 re-inspections of nuisances in course of abatement; 2190 inspections of dwelling-houses; 1082 visits were paid to houses in which cases of infectious diseases occurred; and 1617 to houses infected with measles, &c. ; 481 rooms and 2 schoolrooms were disinfected. This, in addition to the ordinary inspection of slaughter-houses, common lodging-houses, cowsheds, milkshops, &c.

A summary of the work done by the Department will be found at the end of this section ; and the large increase in the amount of work done will be noted.

The work arising out of the abatement of nuisances continues to increase. Some very important works have been carried out in respect of drainage and conversion works. During the year 125 houses have been provided with new drains, and 91 privy middens have been converted into 159 water-closets. It is very necessary that in such work the supervision by your inspectors should be as close as possible, and a good deal of time is taken up in this manner.

In this connection I append a list of streets, courts, &c., in which the houses are entirely on the water-carriage system.

Algernon Street	Holt Street
Ann Street	Irlam Avenue
Ash Street	Irwell Place
Atherton Street	James Terrace
Barsley Street	Kearsley Street

Blears Buildings
 Back Queen Street
 Booth's Place
 Bright Road
 Cambridge Grove
 Carlton Street
 Cavendish Road
 Chantler's Square
 Chadwick Road
 Charlton Avenue
 Church Grove
 Clarendon Road
 Dalton Street
 Dawson's Court
 Devonshire Road
 Dudley Street
 Edison Road
 Ellesmere Grove
 Evelyn Street
 Fletcher Avenue
 Fountain Street
 Garden Street
 Gladstone Road
 Golden Square
 Gorton Street
 Gower Street
 Grange Drive
 Grecian Street
 Hall's Buildings
 Hamilton Avenue
 Hampson's Buildings
 Harrison Street
 Hawthorn Avenue

Henry Street
 Hope Street
 Lansdowne Road
 Lawrence Street
 Mather Avenue
 Mather Road
 Oxford Avenue
 Oxford Square
 Owen Street
 Pine Grove
 Pleasant Road
 Poplar Road
 Pollitt's Buildings
 Prospect Place
 Richmond Grove
 Scotta Road
 Snowdon Road
 Silk Street
 Spencer Street
 Stanley Grove
 Stanley Road
 Station Road
 Talbot Street
 Tan Pit Lane
 The Avenue
 The Polygon
 Thomas Street, Eccles
 Thomas Street, Winton
 Thorp Street
 Watson Street
 Wesley Street
 Wood Street

DRAINAGE EXAMINATIONS.—The smoke test was applied to drains 348 times, and 187 drains were opened up for inspection. All complaints re drains are dealt with as speedily as possible, and endeavours are made to arrange for the examination of drains wherever cases of enteric fever and diphtheria occur.

DAIRIES, COW SHEDS, AND MILK SHOPS.—The cowsheds were in-

spected on 46 occasions, and 135 visits of inspection were paid to milkshops. In some cases there is considerable difficulty in persuading cow-keepers to keep the shippens properly ventilated—especially during the colder portions of the year, otherwise there is not much to complain of.

BAKEHOUSES.—The bakehouses were regularly inspected; 192 visits of inspection being paid to them.

SLAUGHTER - HOUSES.—Fifty-seven visits of inspection were paid to these. There were no seizures of unsound meat, and in respect of its meat supply the Borough appears to be fairly well off.

COMMON LODGING HOUSES.—The two continue to be well kept. 162 visits of inspection have been paid to them.

CANAL BOATS.—During the year ended Dec. 31st, 1903, 61 canal boats were inspected. The inspections were, for the most part, made at the Bridgewater Coal Wharf, Patricroft.

The 61 boats were registered for the accommodation of 296 persons, but the total number of persons found on the boats was only 81, viz. 64 male adults, 13 female adults, and 4 children. Two children were under five years of age, and two were over.

The general condition of the boats continues satisfactory, but the number of infringements of the Acts and Regulations was slightly in excess of previous years. The total number of notices served was 8, and they had reference to absence of certificate 2, painting 3, and dilapidations 3.

No cases of infectious disease were found on the boats.

SMOKE ABATEMENT.—Twenty-eight observations of mill and works chimneys were taken during the year. In one case proceedings were taken before the magistrates in respect of an excessive emission of black smoke. The owners were fined 10/- and costs.

Proceedings were also taken in respect of failure to notify a case of small-pox. In this case the magistrate fined the offender 2/6 and costs.

Proceedings were taken against a person for exposing himself while suffering from small-pox. The magistrates fined the offender 10/- and costs.

Proceedings were taken in respect of non-compliance with notice to abate a nuisance. The Magistrates granted an order with costs. In the case of non-compliance with notice (Sec. 41 P.H.A. 1875) to amend drains, the Magistrates imposed a penalty with costs.

The owner has appealed.

Proceedings were also taken against the owners of a works for causing effluvia which was certified to be a nuisance or injurious to health. (Sec. 114 P.H.A. 1875.)

The Magistrates imposed a fine of £2 and costs.

PUBLIC MORTUARY.—A public mortuary has been erected at the Town's Yard, Patricroft. It was completed in May, and has already been used for the reception of three bodies.

It is a substantial brick building, lined with cream-coloured tiles, and provided with two post-mortem slabs of white earthenware.

A glazed screen has been provided so that a body may be "viewed" without entering its presence.

During the summer months two men were again employed in cleansing and disinfecting house gullies. 21,385 gullies were dealt with, and the carrying out of this work was generally appreciated by the public.

Proceedings taken before the Magistrates.

Offence.	Result.
Failure to Notify case of Small-pox.	Fined 2/6 and Costs 9/3
Non-compliance with notice to abate Nuisance (smoke).	Fined 10/- and 8/6 Costs
Non-compliance with notice to abate Nuisance.	Order granted with Costs
Non-compliance with notice (Sec. 41) P.H.A. 1875) to amend drains	Penalty imposed with Costs. Owner has Appealed.
For exposing himself while suffering from Small-pox.	Fined 10/- and 9/3 Costs.
For causing effluvia which was certified to be a nuisance or injurious to health. (Sec 114 P.H.A. 1875.)	Fined £2 and 9/6 Costs.

SECTION VI.



REPORT ON THE ADMINISTRATION OF THE FACTORY
AND WORKSHOPS ACT, 1901.

SECTION VI.

FACTORY AND WORKSHOPS ACT, 1901.

In accordance with the provisions of Sec. 132 of the above Act, I herewith submit a report of the matters dealt with by the Staff in the Health Department, and arising out of the administration of the Act in Workshops and Workplaces.

WORKSHOPS AND WORKPLACES.—The total number of Workshops on the Register is 78, of which 10 were newly registered during the year ended December 31st, 1903. The number of rooms used or occupied in connection with the 78 establishments is 94. The businesses carried on at the 68 workshops are as follows :—

Dressmaking	...	23	Cabinet Making and		
Bootmaking	...	19	Upholstering...	6	
Millinery	...	9	Laundry Work	...	2
Tailoring	...	8	Wheelwrights	...	2
Cycle Repairing	...	2	Tin-plate Working	...	1
Joiner Work	...	2	Gold-beating	...	1
Picture Framing	...	1	Basket Making	...	1
Carriage Building			...	1	

Each place of business has been carefully inspected as regards its cleanliness, ventilation, and provision of suitable sanitary conveniences, and every room has been measured in order that the number of persons occupying such rooms should be properly regulated.

For some years past, cards indicating the number of persons allowed in each workroom have been placed in the workrooms by the Inspectors. The cards are now as follows :—

Factory and Workshops Act, 1901.

Name of Occupier.....

Address

Nature of business carried on.....

Number of workpeople allowed having regard to the cubic capacity of workrooms.

ROOM No. 1. Cubic space ...feet, being sufficient for.....workpeople during ordinary hours of employment, and for.....during hours of overtime.	ROOM No. 2 Cubic space....feet, being sufficient for.....workpeople during ordinary hours of employment, and for.....during hours of overtime.
ROOM No. 3. Cubic space... feet, being sufficient for.....workpeople during ordinary hours of employment, and for.....during hours of overtime.	ROOM No. 4. Cubic space....feet, being sufficient for.....workpeople during ordinary hours of employment, and for.....during hours of overtime.

Town Hall, Eccles,

.....190

Town Clerk.

The number of persons employed in the whole of the workshops registered is 320, classified as follows : 122 adult males, 110 adult females, 64 female young persons, 4 male young persons, and 20 children.

The number of visits paid to workshops was 168.

Eleven workshops were found to require proper lime-washing, and there was one case of overcrowding. In six cases Sec. 128 of the Act had been contravened with respect to the non exhibition of the abstract.

These matters were promptly attended to upon formal complaint being made.

BAKEHOUSES.

Forty bakehouses have now been placed upon the Register, and to these 192 visits of inspection have been paid.

Six were found to require lime-washing.

UNDERGROUND BAKEHOUSES. There were eleven underground bakehouses in existence within the borough during 1903. Owing to section 101 of the Factory and Workshops Act, 1901, dealing with such underground bakehouses coming into force, before the first day of January, 1904, the Health Committee inspected all these bakehouses during the year, and as a result, all have been closed, with the exception of two. These will also be closed on or before the 25th of March next.

In three cases, entirely new bakehouses have been built, and most of the others have been brought above ground.

No underground bakehouses therefore will be in use in this borough after March, 1904.

The following are the addresses of those premises which were below ground :—

No. 25, Gilda Brook Road	No. 218, Liverpool Road
„ 34, Church Street	„ 266, Liverpool Road
„ 51 & 53, Market Place	„ 3, Worsley Road
„ 104, Liverpool Road	„ 31, Worsley Road
„ 134, Liverpool Road	„ 115, New Lane
183, Monton Road.	

GENERAL STATUTORY REQUIREMENTS.

(a) All bakehouses

(1) Every room or place used as a bakehouse shall be in such a state as to be, on sanitary grounds, fit for use or occupation as a bakehouse.

(2) No water-closet, earth-closet, privy, or ashpit shall be within, or communicate directly with, the bakehouse.

(3) Every cistern for supplying water to the bakehouse shall be separate and distinct from any cistern for supplying water to a water-closet.

(4) No drain or pipe for carrying off fœcal or sewage matter shall have an opening within the bakehouse.

(5) All the inside walls of the rooms of a bakehouse, and all the ceilings or tops of those rooms (whether those walls, ceilings, or tops are plastered or not), and all the passages and staircases of a bakehouse shall be either painted with oil, or varnished, or be limewashed, or be partly painted or varnished, and partly limewashed ; and

(a) Where the bakehouse is painted with oil, or varnished, there must be three coats of paint or varnish, and the paint or varnish must be renewed once at least in every seven years, and must be washed with hot water and soap once at least in every six months ; and

(b) Where the bakehouse is limewashed, the limewashing must be renewed once at least in every six months.

(6) No place on the same level with a bakehouse, and forming part of

the same building, shall be used as a sleeping place, unless it is constructed as follows, that is to say,

- (a) is effectually separated from the bakehouse by a partition extending from the floor to the ceiling ; and
- (b) Has an external glazed window of at least 9 superficial feet in area, of which at the least, $4\frac{1}{2}$ superficial feet are made to open for ventilation. And unless such sleeping room (if separately occupied) complies with the requirements as to cellar dwellings and underground rooms (so occupied) laid down in the Public Health Acts.

(7.) An underground bakehouse shall not be used as a bakehouse unless it was so used at the passing of the Factory and Workshops Act, 1901. (*i.e.* 17th August, 1901.

(8). After January 1st, 1904, an underground bakehouse shall not be used unless certified by the District Council to be suitable for that purpose ; and an underground bakehouse shall not be certified as suitable unless the District Council is satisfied that it is suitable as regards construction, light, ventilation, and in all other respects.

HOME-WORK OUTWORKERS.—Eleven “outworkers” premises have been placed on the Register kept for that purpose, and 27 visits of inspection have been paid to them. In each case, the premises and the conditions under which work was being executed, were found to be satisfactory.

MEANS OF ESCAPE IN CASE OF FIRE.—At one factory reported upon in my last Annual Report, adequate provision of means of escape in case of fire have now been provided. A suitable outside iron fire escape has been fixed, and opening doors and windows communicating therewith, have been provided.

The work of administering those provisions of the Act which affect the Local Authority, takes up a great deal of the time of the members of the Health Staff, and it is a matter for congratulation that so much “extra” work should have been carried out during the year. The above report is, necessarily, but a brief epitome of the work done, and conveys no idea of the amount of time which has been involved.

**Tabulated particulars of Nuisances dealt with, and of other
Work done by the Health Department, during the Year
ended December 31st, 1903.**

	1903	1902	1901	1900
House Drains—taken up, cleansed & re laid ..	504	423	324	372
„ new systems provided ...	29	81	115	56
„ slopstone waste pipes, disconnected from.	2	4	2	1
„ bath „ „ „	...	...	...	1
„ lavatory „ „ „	1	4	9	3
„ privy drains „ „ „	121	160	92	73
„ downspouts „ „ „	166	117	169	171
„ ventilated	34	35	28	16
„ want of	4	2	...	11
Gully Traps—defective	303	216	199	204
„ want of	12	12	6	18
„ filthy	7	4	12	...
Soil Pipes—defective	16	14	4	6
„ „ ventilation of	12	8	6	21
„ bath and lavatory waste pipes dis- connected from	2	2	...	3
downspouts do. do	5	4	1	3
Water closets—defective ‘pan’	6	22	10	10
„ various defects in	45	21	11	15
„ inefficient flush to	1	8	6	1
„ insufficient in mills, &c. (No. of cases) ...	4	2	9	12
Slop-water closets—defective	12	5	1	8
Defective privy pits	148	203	124	133
„ ashpits	28	50	64	44
„ ashtubs	166	104	...	...
„ paving of yards and passages	166	202	133	96
„ „ cellar floors, &c	54	39	32	53
„ channelling	1	..	1	...
„ slopstone waste pipes	147	150	83	67
„ brickwork around slop waste pipes ...	116	110	64	63
„ eaves gutters and spouting	27	32	24	31
„ bath and lavatory waste pipes	7	6	...	...
„ roofs	6	19	12	6
„ manure middens	4	4	1	4
„ slopstones	1	7	5	4
„ urinals	3	2	4	4
Cesspools abolished	9	7	2	6
Dirty houses cleansed	11	15	14	19
„ van dwellings cleansed	1	8	...	...
Yards, &c. cleansed	7	16	3	19
Closets, filthy, cleansed	8	10	14	15
House premises, damp	4	1	6	11
Houses overcrowded	3	14	2	10
Accumulations of manure and rubbish ...	57	155	48	61
Buildings—obstructive to light and air, removed	27	77	11	11
Keeping fowls, &c. so as to cause nuisances	12	82	11	23
‘Backing up’ of sewage	1	...	1	...
Street gullies, defective	2	2	...	31
Manholes—foul smells from .. ..	...	1	...	7

	1903	1902	1901	1900
Waste of water	8	26	12	6
Want of manure middens	6	6	6	12
„ ashpit accommodation	19	7	...	...
Miscellaneous	57	41	7	24
Milkshops and cowsheds requiring limewashing ...	1	2	12	15
„ „ defects in	1	1	1	...
Bakehouses requiring limewashing	6	4	11	13
„ „ defects in ... ..	...	4	1	...
Workshops requiring cleansing & limewashing ...	6	18	3	...
„ „ defects in remedied	2	...	...	...
Slaughter-houses requiring limewashing ... ..	...	1	8	12
„ „ „ defects in remedied	3	...	2	...
Back to back houses pulled down	2	...	...	...
No. of privies converted into water closets	91	137	91	73
„ water closets provided in lieu of privies ...	152	226	148	119
„ latrines „ „ „ „	7	23	...	...
„ houses not newly erected provided with new drains	125	120	115	87
No. of preliminary notices served	20	158	12	37
„ committee's „ „	72	89	58	116
„ complaints made under Sec. 41 P.H.A. ...	9	44	16	55
„ notices served under do.	28	58	...	44
„ notices under Sec. 5 of I.D.P.Act. 1890, requiring stripping and limewashing ...	21	30	...	...
„ reports made under Sec. 36 P.H.A.	43	38	13	55
„ notices served do. P.H.A.	43	38	13	49
„ cases before the Magistrates	6	2	3	10
„ Letters written	1774	1601	1211	1617
„ Letters received	925	1040	907	768
„ of visits in cases of zymotic diseases ...	1082	889	647	783
„ „ „ of phthisis	56	37	32	...
„ „ „ in other cases of sickness	1617	1047	937	254
„ rooms disinfected	481	444	373	415
„ schools do.	2	5	10	1
„ stables, &c. do.	9	1	...	...
„ Walls, &c. stripped and limewashed	298	425	401	360
„ Re-inspection of nuisances	4581	4714	3159	2523
„ Inspections of dwellings	2190	2391	1127	1021
„ „ slaughter houses	57	73	115	90
„ „ milkshops	135	80	145	135
„ „ cowsheds	46	59	111	93
„ „ common lodging houses	162	174	59	69
„ „ houses let in lodgings	53	29	3	...
„ „ bakehouses	192	144	140	89
„ „ workshops	168	208	24	27
„ „ outworkers' premises	27	16	...	...
„ „ stables, &c.	30	11	21	...
„ „ van dwellings	232	117	52	18
„ „ canal boats	61	61	62	82
„ cottage water closets inspected	756	519	784	133
„ schools inspected	13	5	5	1
„ owners seen re nuisances	247	403	359	382
„ Smoke observations	28	24	30	21

	1903	1902	1901	1900
No. of 'tests' applied to drains ...	348	336	389	337
„ drains opened up for examination ...	187	241	223	186
„ typhoid pails removed, cleansed, &c. ..	100	157	224	156
„ privy pits disinfected	9	33	41	19
No. of Notices under Sec. 93 Eccles Corporation Act				
1901	5	83	...	...
„ Certificates under Sec. 93, E.C.A., 1901 ..	5	83	...	...

SANITARY LEGISLATION IN 1903.

There was not much Public Health Legislation during the last session in Parliament. The following are the only two important Acts dealing with Health matters :—

HOUSING OF THE WORKING CLASSES ACT.

This Act amends, in several very important respects, the law relating to the housing of the working classes, and facilitates very considerably the adoption and enforcement of the Housing Acts by local authorities.

Section 1 (1) provides that the maximum period which may in future be sanctioned as the period for which money may be borrowed by a local authority for the purposes of the "Housing Acts" shall be 80 years, and as regards money so borrowed, 80 years are substituted for 60 years in *Section 234* of the Public Health Act, 1875. Further, *Section 1 (2)* provides that money borrowed under the Housing Acts shall not, as at present, be reckoned as part of the debt of the local authority for the purposes of the limitation on borrowing under Sub-sections 2 and 3 of *Section 234* of the Public Health Act, 1875. [In this connection the Local Government Board have already made it known that they propose in future, as a general rule, to allow the full term of 80 years for the repayment of money borrowed for the purchase of freehold land, and 60 years for the repayment of money borrowed for the erection of buildings. Where money has been borrowed in recent years for these purposes, the Board will be ready to consider applications for sanction to the re-borrowing of the outstanding balances for 80 or 60 years, as the case may be, from the date of the original borrowing.]

In London, a borough council may at present borrow, with the consent of the London County Council, under the Metropolis Management Act, 1855, but under *section 190* they are required, in order to form a sinking fund for paying off mortgages created under the Act, to set aside in every year a sum not less than 2 per cent. on the amount of the principal moneys secured thereby, which sum is to accumulate at compound interest. It is now provided, by *Section 15* of the new Act, that for the purpose of carrying

into effect the provisions of the Act as to the maximum period for which money may be borrowed, 80 years shall be substituted for 60 years in Section 27 of the Metropolitan Board of Works (Loans) Act, 1869, and such sum as will be sufficient, with compound interest, to repay the money borrowed within such periods, not exceeding 80 years, as may be sanctioned by the London County Council, shall be substituted for 2 per cent. in Section 190 of the Metropolis Management Act, 1855.

Under the existing Housing Acts, some of the functions of the Central Authority in regard to London are at present exercised by the Secretary of State, and some by the Local Government Board. *Section 2* of the new Act makes provision for an Order in Council being made assigning to the Local Government Board any powers and duties of the Secretary of State under the Housing Acts, or under any scheme made in pursuance of those Acts, and the powers of the Secretary of State under any local Act, so far as they relate to the housing of the working classes. Any such powers and duties so assigned will then become powers and duties of the Local Government Board.

The Standing Orders of the Houses of Parliament require that in all Bills for local Acts (including Bills to confirm Provisional Orders) *which give power to take land compulsorily or by agreement*, clauses shall be inserted providing that the promoters of the Bill shall not in the exercise of such power acquire more than a prescribed number of houses occupied by persons belonging to the labouring class, unless they have obtained the necessary approval to a scheme for providing certain housing accommodation.

A Joint Committee of both Houses recommended last year that provision on the subject should be embodied in a general Act of Parliament. This was done by *Section 3 of the New Act*, which will apply to all cases where, under the powers given by any future local Act or Provisional Order, or Order having the effect of an Act, land is acquired, whether compulsorily or by agreement, by any authority, company, or person, or where land is so acquired compulsorily under any general Act other than the Housing Acts. The Housing Acts are excepted because they contain special provisions on the subject.

Particulars of the requirements imposed on any such authority, company, or person are contained in the *Schedule to the Act*, which provides that if in any borough, urban district, or rural parish, the authority, company, or person have power to take under the Act, or Order under which the land is acquired, working men's dwellings occupied by thirty or

more persons belonging to the working class, they shall not enter on any such dwellings until the Local Government Board have either approved of a housing scheme, or decided that a scheme is not necessary. The schedule sets out generally the requirements of a housing scheme, and contains various provisions in relation to the making, enforcement, and modification of such schemes.

By Section 10 of the Act of 1890, where outside London an official representation is made to the council of a borough or urban district with a view to their passing a resolution in favour of an improvement scheme under Part I, of the Act, and the council fail to pass any resolution in relation to such representation, or pass a resolution to the effect that they will not proceed with such scheme, the Local Government Board are empowered to direct a local inquiry to be held and a report to be made to them as to the correctness of the official representation and any matters connected therewith on which they may desire to be informed.

The powers thus given to the Board are supplemented by *Section 4 (1)* of the new Act. This enactment enables them, if, on the report made to them on an inquiry directed as above-mentioned, they are satisfied that a scheme ought to have been made for the *improvement of the area* to which the inquiry relates, or some part thereof, *to order the Council to make such a scheme*. The scheme may be ordered to be made under either Part I., or Part II., of the principal Act, and the council may be ordered to do all things necessary under the Housing Acts for carrying the scheme so made into execution.

Where an Order of this nature is made, it will be the duty of the Council to make a scheme under Part I., or to direct a scheme to be prepared under Part II., of the principal Act, as if they had passed the resolution required under Section 4, or Section 39 (as the case may be) of that Act, and to do all things necessary under the Housing Acts for carrying the scheme into effect.

The Order of the Board will be *enforceable by mandamus*.

It has hitherto been requisite under Section 7 of the Act of 1890, that, upon the completion of an improvement scheme under Part I, of that Act, the local authority should publish an advertisement stating certain prescribed particulars in a local newspaper during three consecutive weeks in the month of September, or October or November, and should during the month next following the month in which the advertisement was published serve certain prescribed notices. Moreover, any Provisional Order made by virtue of

Section 8 (4) of the Act of 1890 confirming an improvement scheme has under Section 8 (6), required for its validity confirmation by Parliament.

Section 5 (1) of the new Act will enable the advertisements to be published for three consecutive weeks at any period of the year, and will allow the prescribed notices to be served during the thirty days next following the date of the last publication of the advertisement. Moreover, by *Section 5 (2)* an Order of the Local Government Board confirming an improvement scheme will be effective without confirmation by Parliament in certain circumstances.

Section 6 provides power to modify in certain cases schemes made under Parts I and II. of the Act of 1890.

Cases sometimes occur where it will be found beneficial *to include* in a reconstruction scheme, under Part II. of the principal Act, some *neighbouring lands*, although not comprising buildings in themselves dangerous or prejudicial to health. *Section 7* of the New Act will enable this to be done if the council under whose direction the scheme is made are of opinion that the inclusion is necessary for making their scheme efficient. But where this course is adopted, the prohibition contained in Section 41 (2) of the Act of 1890 against giving any additional allowance in respect of compulsory purchase, in settling the amount of compensation, is excluded from application in the case of any land which may be thus included. The effect of the amendment of the law made by *Section 7* is virtually to make the provisions of Part II, of the principal Act uniform with those of Part I. in this matter.

Where a council desired *to obtain a closing order* in regard to a dwelling house in a state so dangerous or injurious to health as to be unfit for human habitation, it has hitherto been necessary for them, under the procedure prescribed by Section 32 of the Act of 1890, before they could obtain the order, to give notice to the owner or occupier of the house to abate the nuisance. The *procedure is now simplified* as regards any dwelling-house which in the opinion of the council is either (a) not reasonably capable of being made fit for human habitation, or (b) is in such a state that its occupation should be immediately discontinued. In these cases the necessity for serving such a notice as above mentioned before obtaining a closing order is dispensed with by *Section 8 (1)* of the new Act, which further enables a justice to issue a summons for a closing order, and a closing order to be granted, though such a notice has not been served.

Section 34 of the Act of 1890 empowers the council to demolish a house in respect of which an order for demolition has been made if the owner himself fails to comply with the order, and requires them to sell the materials

and after deducting the expenses of the demolition to pay the balance of money (if any) to the owner. There is, however, no provision to meet the case when the sale of the materials does not cover the *cost of demolition*. This is remedied by *Section 9* of the new Act, which enacts that, where the amount realised by the sale of materials under *Section 34* of the principal Act is not sufficient to cover the expenses incident to the taking down and removal of a building, the council may recover the deficiency from the owner of the building as a civil debt in manner provided by the Summary Jurisdiction Acts, or under the provisions of the Public Health Acts relating to private improvement expenses.

A more speedy and efficacious way of *obtaining possession of a house* in respect of which a *closing order* has been made than that provided by *Section 32 (3)* of the principal Act is afforded by *Section 10* of the new Act. Under its provisions the local authority may have recourse, whatever may be the value or rent of the house, either to the procedure prescribed by *Sections 138 to 145* of the County Courts Act, 1888, or to that under the small Tenements Recovery Act, 1838. The expenses incurred by the local authority in taking these proceedings can be recovered from the owner as a civil debt under the Summary Jurisdiction Acts. The power of enforcing the penalty provided for in *Section 32 (3)* of the principal Act will still remain.

The effect of *Section 11 (1)* of the new Act is to empower the council if they *provide lodging-houses* for the working-classes under Part III. of the principal Act, or if they *supply housing accommodation* under Part II. of the principal Act, or under any scheme made in pursuance of any of the Housing Acts, to provide and maintain, in connection with the lodging-house or dwelling accommodation, any building adapted for use as a shop, any recreation grounds, or other buildings or land which, in the opinion of the Board, will serve a beneficial purpose in connection with the requirements of the persons for whom the lodging-houses or dwelling accommodation are provided,

Under *Section 75* of the Act of 1890, a condition is implied in any contract made after August 14th, 1885, for the letting of a house or part of a house for habitation by persons of the working classes (as such letting is therein defined) to the effect that the house is at the commencement of the holding fit for human habitation.

As this enactment stood prior to the passing of the Act of last session it would seem that there is nothing to prevent an agreement being made between the landlord and the tenant contracting themselves out of its pro-

visions. Any such agreement made after the date of the passing of the new Act, August 14th, 1903) is made void by *Section 12* of that Act.

The service of notices and other documents is facilitated by *Section 13* of the new Act.

Section 14 removes another difficulty which has been experienced in the administration of the Housing Acts in London. In cases where the London County Council carry out reconstruction schemes under the provisions of Sub-section (5) of Section 46 of the principal Act, the Secretary of State is empowered by Sub-section (6) of that section, in certain circumstances, to order a payment or *Contribution* towards the expenses of the London County Council to be made *by the council of a metropolitan borough*, but hitherto in the absence of such an Order the metropolitan borough council, have had no power to make any such payment or contribution.

The new Act, by *Section 14*, enables a metropolitan borough council, if they think fit, to pay or contribute to the payment of any expenses of the London County Council under Section 46 (5) of the principal Act in connection with a scheme of reconstruction, and to borrow any money required for the purpose under Section 46 (2), and provides that an Order of the Secretary of State, as above mentioned, shall not be necessary except in cases of disagreement between the county council and the council of the borough.

This Act does not extend to Scotland or Ireland. It came into force on August 14th, 1903.

EMPLOYMENT OF CHILDREN ACT.

This is an Act to make better provision for regulating the employment of children. It provides (*Section 1*) that any Local Authority—that is, the Corporation of the City of London, the town councils of boroughs of over ten thousand inhabitants, the district councils of urban districts of twenty thousand inhabitants, and elsewhere the county councils—may make by-laws—

(i) Prescribing for all children, or for boys and girls separately, and with respect to all occupations or to any specified occupation—

- (a) The age below which employment is illegal ; and
- (b) The hours between which employment is illegal ; and
- (c) The number of daily and weekly hours beyond which employment is illegal.

(ii) Prohibiting absolutely or permitting, subject to conditions, the employment of children in any specified occupation.

Section 2 Provides that any local authority may make by-laws with respect to street trading by persons under the age of sixteen, and may by such bye-laws—

- (a) Prohibit such street trading, except subject to such conditions as to age, sex, or otherwise, as may be specified in the bye-law, or subject to the holding of a licence to trade to be granted by the local authority ;
- (b) Regulate the conditions on which such licences may be granted, suspended and revoked ;
- (c) Determine the days and hours during which, and the places at which, such street trading may be carried on ;
- (d) Require such street traders to wear badges ;
- (e) Regulate generally the conduct of such street traders ;

Provided as follows :—

- (1) The grant of a licence or the right to trade shall not be made subject to any conditions having reference to the poverty or general bad character of the person applying for a licence or claiming to trade.

- (2) The local authority, in making bye-laws under this section, shall have special regard to the desirability of preventing the employment of girls under sixteen in streets or public places.

Section 3 contains some general restrictions on the employment of children, as to the hours within which children shall not be employed, prohibiting the employment of children under eleven in street trading, &c.

Section 4 has some general provisions as to bye-laws, as to their submission to the Home Secretary for confirmation, as to their being made applicable either to the whole or part of the area of the local authority in each case, &c.

Section 5 prescribes the penalties for offences under the Act.

Section 6 deals with the liability of agents or workmen for offences under the Act; and *Section 7* requires that proceedings for an offence must be instituted within three months after the commission of the offence.

Section 8 gives power to the officers of local authorities to obtain justices' orders to enter places of employment; *Section 9* deals with employment in factories; *Section 10* has a saving for industrial and other schools; *Section 11* deals with the granting of licences to children under 10 years; and *Section 12* provides for the payment of expenses out of the county rate in the case of counties, out of the borough fund or borough rate in the case of boroughs, and out of any rate or fund applicable for defraying expenses under the Public Health Acts in the case of other urban districts.

The Act is made applicable to Scotland and Ireland, with the the necessary modifications. It comes into operation on January 1st, 1904.

REPORT

— OF THE —

SEWAGE FARM MANAGER.

BARTON GRANGE.

THE ECCLES CORPORATION SEWAGE FARM.

MANAGER

•

GEORGE W. WILLIS.

The pumping and treatment of the Sewage of the Borough has been carried on without intermission the whole of the year. The boilers, engines, and pumps have been maintained in good working condition.

The pumping machinery and plant have been taxed above their capacity in coping with the flow of sewage and storm-water during the year. The rainfall during the year has been above the average, no abnormal fall, but a continuous fall that constantly kept the pumps in full action, whereas, in abnormal or excessive rainfall, the storm-water overflows come quickly into operation, the greater part of the storm-water passing then direct into the water-courses.

The Local Government Board having sanctioned, after an Inquiry held by Colonel Stewart, at the Town Hall, the erection of a Refuse Destructor, at an estimated cost of £4,250. The Sewage Disposal Committee advertised for, and accepted tenders from the undermentioned firms:—

Destructor Furnaces. Messrs. Meldrum Bros., Timperley, Manchester, £1,985. Works:—Two separate and independent units (twin cell type), each unit connected to one boiler by a combustion chamber, thereby allowing of complete overhauls and repairs, when required, to furnace and boiler not in working operation. Each unit to be equal to a 24 tons disposal of ordinary refuse per 24 hours, with a 10 per cent margin, when required, the residue to be a hard vitreous clinker, and not more than 33 per cent of the quantity of refuse destroyed. The furnaces to be so constructed that the evaporation in boilers shall be equal to one pound of water per pound of refuse destroyed, water passing into the boilers at 212 degrees Fah.

Destructor Buildings. Messrs. E. Marshall & Sons, Ashton-under-Lyne, £1,168. Works:—Building, 62ft. x 32ft., attached to existing buildings of the same character and design, to cover destructor furnaces, clinkering plant, &c., bath-room and fittings, approach road, &c.

Clinkering Plant. Mr. Thomas T. Crook, Bolton, £865 14s. Works :— Vertical inverted engine, shafting, steam pipes, boiler mountings, clinkering mill, with a capacity of four tons per hour, elevator, revolving screen, shoots and hoppers, refuse hoppers, alteration to existing sewage screen, mortar mill, &c.

The erection of building is about completed ; the clinkering plant is well in hand, and the furnaces will be completed by the end of March.

The Local Government Board did not sanction, after an Inquiry, held by Colonel Stewart, at the Town Hall, the construction of Bacteria Beds, at an estimated cost of £2,000, the suggested scheme, in their opinion, being inadequate for the treatment of the sewage at present flowing to the farm, suggesting that the works required, in addition to the proposed bacteria beds, were extension of settling tanks to twice their present capacity, and the provision of storm-water filters of a sufficient area, to treat four times the average daily dry weather flow of sewage to the farm.

The Sewage Disposal Committee have, at the present time, a scheme under consideration (including the treatment of the sewage of the Borough, in the event of all privies being converted into water-closets) to meet the requirements of the Local Government Board.

SEWAGE FLOW. The flow of sewage to the farm varies considerably. Guagings taken in June, after twelve clear days without rain, gave an average flow of 1,225,000 gallons per day, the guagings extending over seven days. Guagings taken in September gave an average daily flow of 1,430,000 gallons. Fully 950 million gallons of sewage and storm-water have been pumped and treated during the year.

SLUDGE. The whole of the sludge has been utilized as manure upon the farm, during the past year.

PRODUCE. The summer of 1903 has been the worst experienced since the laying out of the farm. The crops were starved out by the excessive amount of sewage, &c., poured on the farm each day, together with a nearly continuous rainfall.

DAIRY CATTLE. The head of dairy cattle kept upon the farm averaged 35. The cattle have done fairly well, considering the season.

RECEIPTS. The receipts from farm produce, &c., will be about £1,200.

The rainfall during 1903 upon the Eccles Corporation Sewage Farm has been as under :

Month.	Rainfall per Month.	Days on which over or fell.	Greatest fall.
January ...	1·790	13	·380
February ...	3·250	17	·440
March ...	3·740	22	·630
April ...	1·450	13	·250
May ...	4·105	19	·470
June ...	1·745	9	·555
July ...	3·924	17	·450
August ...	4·109	24	·550
September ...	4·914	16	·930
October ...	6·810	29	·955
November ...	4·315	21	·720
December ...	·986	14	·160
Total ...	41·138	214	

Effluents from the Treatment of Sewage.

No.	Description of Sample	Oxidizable Organic matter	Method of Treatment.	Remarks.
		Oxygen absorbed 4 hours test. Grains per galln.		
36	Eccles Corporation Jan. 6th, 3·0 p.m. Heavy rain on previous night and day.	0·54	Tanks and land.	Light brown, with brown sediment. No smell.
15	Eccles Corporation April 21st, 11·45 a.m. Fine weather.	0·31	do	Slightly turbid, brown flocculent sediment, slightly soapy smell.
22	Eccles Corporation June 23rd, 1·45 p.m. Fine weather.	1·20	do.	Slightly turbid, brown effluent. Brown sediment, strong earthy smell.
33	Eccles Corporation Sep. 23rd, 3·0 p.m. Fair weather.	1·31	do.	Slightly brown liquid, dark sediment, slight smell.

(Signed),

FRANK SCUDDER, F.I.C.,

For Sir Henry Roscoe,

Mersey & Irwell Joint Rivers Committee.

* HOUSES CERTIFIED FOR HABITATION DURING THE YEAR 1903.

Irwell Ward ...	2 houses	Barton Ward ...	57 houses
Eccles Ward ...	59 houses and 3 lock-up shops	Winton Ward ...	37 houses
Monton Ward ...	46 houses and 1 hotel	Patricroft Ward...	43 houses and 1 Enginenmen's lodging-house.

Total—244 houses, 3 lock-up shops, and one enginenmen's lodging-house.

SEWERS, NEW, AND OLD RE-LAID DURING 1903.

Athol Street	Back Thorp Street, East (extension)
Back Athol Street, East (relaid)	do. do. West
Back Barsley Street, North, (extension)	do. Vane Street, South,(re-laid)
do. do. South	do. Wesley Street, East
do. Church Street, West	do. do. West
do. Evelyn Street, East	do. Winifred Street, South
do. Harrison Street, South	do. Wycliffe Street, West
do. Irwell Grove, North (re-laid)	Cleavely Road
do. Lane End, East	Frederick Street
do. Lansdowne Road, East	Holt Street
do. Lawrence Street. North	Helen Street
do. Lincoln Street, West (re-laid)	Hawthorn Avenue
do. Mitchell Street, South (extension)	King Street (re-laid)
do. Nelson Street, East (re-laid)	Lewis Street (extension)
do. Pleasant Street, North (re-laid)	Mather Road (surface water drain)
do. Richmond Grove, North	Mitchell Street (extension)
do. Stanley Grove, North (extension)	Station Road
do. Station Road, East (extension)	Queen Victoria Street (re-laid)
Back Station-rd. West (extension)	Reginald Street
	Railway Terrace
	Tipping Street (surface water drain)
	Watson Street
	Wesley Street
	Wychffe Street

* Kindly furnished by the Borough Engineer, who has also prepared the Map of the Borough.

STREETS AND PASSAGES PAVED, ETC. DURING 1903 :

Beech Street (part of) 97 $\frac{1}{3}$ lin. yds.	Back Egerton Street... 95 $\frac{2}{3}$ lin. yds.
Back Arnold Street... 65 „	Lansdowne Road ... 246 „
do. Atherton Street, 64 $\frac{1}{2}$ „	Mather Road ... 145 „
do. Church Street... 60 $\frac{5}{6}$ „	<div><div><div>Park Road</div><div>Pine Grove</div><div>Poplar Road</div><div>Catherine Street</div></div><div><div>Kerbing and</div><div>Flagging</div><div>Works only.</div></div></div>
do. Station Road (west) 186	
do. Queen Victoria Street	
(east)... 77 lin. yds.	
do. do. (west)... 91 „	Queen Victoria Street 209 lin. yds.
Dalton Street ... 77 „	Station Road ... 160 „
Holt Street ... 168 $\frac{1}{3}$ „	Tipping Street ... 175 „
King Edward Street ... 44 „	Trevelyan Street... 80 „

Total length added for scavenging ... 2041 $\frac{2}{3}$ lin. yds.

In 1901 the population of the Borough was ... 34,369

In 1903 the population of the Borough was estimated to be 35,600

EXCREMENT AND REFUSE DISPOSAL.—All night-soil is disposed of to farmers, and ashpit refuse is tipped at Peel Green.

WATER-CLOSETS.—These are being provided in all new property, and in addition 159 water-closets and ashbins have been provided for old property, replacing 91 privy pits which have been abolished.

Ordinary washdown water-closets are recommended in all instances.

PRIVY MIDDENS.—There are now 2555 privies and 337 ashpits in the Borough, in addition to 3555 ashtubs and 25 pails. The privies and ashpits have been cleansed over seven times during the year, and the ashtubs are cleansed every week. The cleansing is done in the daytime during the four winter months, and in the night-time during the remainder of the year. When the material has been thrown on the paved streets the area is well flushed after sprinkling with a 35 per cent chloride of lime.

SECTION VII.

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ANNUAL REPORT

— OF —

C. W. LASKEY, CHIEF SANITARY INSPECTOR,

(Superintendent of the Town's Yard and Cleansing and Scavenging
Departments,)

YEAR ENDED DECEMBER 31ST, 1903.

SECTION VII

—0—

Report of the Superintendent of the Town's Yard and Cleansing and Scavenging Departments.

Sanitary Inspectors' Office.

To the Chairman and Members of the Cleansing & Scavenging Committee.

Gentlemen,

I have the honour of submitting my report of the work done in the above-named Departments during the year ended December 31st, 1903. This, my tenth annual report, gives evidence of maintained efficiency.

CLEANSING DEPARTMENT.—I beg to submit the following tables, which show the amount and character of the work done, together with the cost of the manual and team labour employed.

Month.	No. of Privies and Ashpits Cleansed.	No. of houses to which they belong.	No. of Loads removed.	Loads per Ashpit at time of emptying.	No. of Emptyings of Ashtubs.	No. of Loads ashtub refuse removed.	Average Cost per Load.	No. of Complaints re Ashpits.
January ...	1857	3131	668	'36	12736	253	4 1	
February .	1820	3112	565	'31	12816	228	4 1½	
March.....	1362	2159	497	'36	16070	252	4 2	
April	1513	2541	599	'39	12988	260	4 2½	
May	1230	1966	563	'45	13104	250	4 2½	2
June	1769	2995	726	'41	16540	243	3 8½	
July.....	2000	3312	659	'33	13348	263	4 3½	
August ...	1911	3258	519	'27	13626	242	4 2	
September	2169	3510	626	'28	17175	251	4 2	
October...	2080	3474	610	'29	13888	268	3 11	
November	1879	3128	546	'29	14104	253	4 0½	
December	1807	2975	635	'35	17780	309	4 2½	
Total 1903 ...	21397	35561	7213	'33†	174177	3072	4 1½†	2
" 1902 ...	22724	37592	8015	'37†	152841	2856	4 1†	12
" 1901 ...	24003	39691	8208	'34†	126658	2704	4 1†	7
" 1900 ...	22197	36685	9335	'42†	102571	2193	3 11†	4
" 1899 ...	22916	38117	8767	'38†	78181	1803	3 10½†	10
" 1898 ...	22906	36556	8621	'39†	59027	1423	3 8½†	6

† Averages.

Month.	1903						1902						1901					
	Manual Labour			Team Labour.			Manual Labour			Team Labour			Manual Labour			Team Labour		
	£	s	d	£	s	d	£	s	d	£	s	d	£	s	d	£	s	d
January	71	8	11	117	2	4	75	3	6	101	17	6	85	3	11	111	0	0
February	69	5	8	93	10	9	58	2	1	85	11	8	78	14	1	107	0	10
March	60	18	6	95	14	6	73	7	2	114	11	0	69	5	11	112	5	0
April	80	3	3	101	3	10	97	13	10	127	15	0	69	18	0	104	19	2
May	64	18	7	106	1	10	75	7	0	116	12	9	91	8	7	110	0	8
June	72	5	3	108	6	6	73	16	10	115	13	6	78	0	8	123	1	8
July	82	12	7	116	0	6	96	17	3	132	13	0	96	2	7	122	3	4
August	63	3	4	95	14	6	69	4	7	111	14	9	73	3	5	99	10	0
September...	79	14	10	102	18	10	67	13	7	98	8	9	68	12	8	93	3	8
October.....	63	19	3	108	4	9	77	16	9	105	5	3	87	18	4	112	18	4
November...	63	14	1	98	10	6	63	5	2	95	1	5	68	4	4	110	11	2
December...	86	5	5	113	11	6	88	4	1	106	5	11	67	0	1	90	5	4
TOTAL ...	858	7	8	1257	0	4	916	11	10	1311	10	6	933	12	7	1296	19	2
	£2215 8 0						£2282 2 4						£2230 16 9					

Upon examination of the above tables, it will be seen that there has been a further increase in the amount of work done. It is true that the number of cleansings of ashpits is less by 1327, as compared with 1902, but the number of cleansings of ashtubs is greater by 21,336—an average of over 400 weekly.

It is satisfactory to note that this increase in the amount of work done has not entailed any increase in cost. *In fact the total cost of team and manual labour is actually £112 14s. 4d. less than in the previous year, and £115 8s. 9d. less than in the year 1901.* The total cost of manual and team labour employed in this department was £2115 8s. 0d. as compared with £2228 2s. 4d. during 1902, and £2230 16s. 9d. during 1901. This is brought about mainly by the increasing proportion of houses with ashbin accommodation, and the gradual extinction of privy middens and ashpits.

The number of privy pits now in existence in the Borough (Dec. 31st, 1903) is 2555—91 having been converted into water closets, and 36 entirely abolished during the year. The number of ashpits was reduced from 354 to 337. The total number of privies and ashpits is therefore 2892. The total number of cleansings was 21397, and the average number of visits paid to each pit for cleansing purposes was nearly 7 $\frac{1}{4}$. The pits contained less refuse than ever, as the average contents per ashpit per visit were only $\cdot 33$ of a load. Never before was there so little refuse, and further proof of the efficiency of the Cleansing Department is thus afforded.

The number of ashtubs has increased from 3136 to 3555 (Dec. 31st, 1903) and these are cleansed weekly. I have in previous reports shown how much more economical is the ashbin system, and if any further proof were required, it is furnished by the fact that *notwithstanding the increasing number of dwellings, the cost of the work during the past three years, has steadily decreased.*

Comparative Summary of Work done during six years ended Dec. 31st, 1903

Year.	No. of Privies and Ashpits cleansed.	No. of Houses to which they belong	No. of loads removed.	Average contents of Ashpits.	No. of Emptyings of Ashbins.	No. of loads of Ashbin refuse removed.	Average cost per load.	No. of complaints received.	Cost of Manual labour.	Cost of Team labour.	Total Cost.
1898	22906	36556	8621	Loads, .39	59027	1423	3 8½	6	£ 837 16 s. 7 d.	£ 71017 8 s. 7 d.	£ 71855 5 s. 2 d.
1899	22916	38117	8767	.38	78181	1803	3 10½	10	897 15 11	1174 4	42072 0 3
1900	22197	36685	9335	.42	102571	2193	3 11	4	937 5 7	1326 1 11	2263 7 6
1901	24003	39691	8208	.34	126656	2704	4 1	7	933 12 7	1296 19 2	2250 16 9
1902	22724	37592	8015	.37	152841	2856	4 1	12	916 11 10	1311 10 6	2228 2 4
1903	21397	35561	7213	.33	174177	3072	4 1½	2	858 7 8	1257 0 4	2115 8 0

	1898.	1899.	1900.	1901.	1902.	1903.
Cost of carting per day ...	9/-...	10/-...	10/-...	10/-...	10/6...	10/6
Rate of wages per day ...	4/-...	4/-...	4/-...	4/2...	4/2...	4/2

In considering the above table, it must be borne in mind that in 1898, the estimated number of houses in the Borough, was 7254, while in 1902 the number was 7772,

In 1894, when the number of houses was estimated to be 6735, the total cost of manual and team labour was £2013 9s. 7d., and it must be remembered that team labour then, only cost 7/6 per day, as compared with 10/6 now, while the labourers were paid 3/8 per day, as compared with 4/2 now.

The total number of loads of refuse removed was 10285, or 586 less than during 1902. They were disposed of as follows :—

7088	loads of refuse tipped at Peel Green
2004	„ nightsoil taken to Peel Green
1193	„ „ „ farmers

The number of loads of nightsoil sold at the dépôt was 532.

There has been no increase in the staff, the same number of men are employed as in the four previous years.

In connection with the Scavenging Department, the following tables show the amount and variety of the work done by that department, together with the particulars of cost.

Month.	Loads of snow removed,	Loads of sand used on streets	Loads of water used on streets	No. of street gullies cleansed.	No. of manhole dirt boxes cleansed.	No. of cart loads refuse removed from streets.	No. of hand cart loads refuse removed from streets.
January ..	...	...	...	1183	...	131	65
February ...	...	8	...	1491	...	133	97
March ...	...	...	...	1752	...	125	128
April ...	...	...	447	1428	...	130	120
May ...	...	...	951	1695	...	126	134
June ...	...	...	1700	1682	593	120	132
July ...	...	...	812	2198	...	143	137
August ...	...	...	483	1578	..	135	133
September .	...	...	406	1669	...	142	133
October ...	...	2	23	1717	...	140	141
November .	...	...	...	1719	617	140	123
December .	...	19	...	1614	..	146	120
Total 1903	...	29	4822	19726	1210	1611	1463
Total 1902	459	85	2277	18074	1249	1760	2055*
Total 1901	15	204	3778	17252	1011	1663	2397*
Total 1900	2513	44	3170	20250	1064	1628	3063*
Total 1899	346	162	3575	17220	800	1728	3419*

*Barrow loads.

Month.	1903		1902		1901	
	Manual Labour.	Team Labour	Manual Labour.	Team Labour	Manual Labour	Team Labour.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Jan.	44 10 11	38 9 2	70 7 11	43 0 0	51 17 6	37 17 6
Feb.	45 13 1	37 16 0	80 6 9	71 2 6	45 2 7	40 17 6
Mar.	45 14 4	36 1 11	46 4 11	36 7 6	42 19 3	31 5 0
Apl.	57 17 0	48 0 4	57 2 10	45 9 2	43 3 10	35 10 0
May	45 18 0	56 19 3	44 4 8	42 18 4	55 0 2	54 5 0
June	47 18 4	67 1 0	42 0 11	49 14 0	47 14 10	55 5 0
July.	60 2 6	57 12 4	56 3 11	52 17 5	57 2 5	67 13 4
Aug.	45 18 0	49 4 4	48 9 4	46 9 3	45 18 0	40 13 4
Sept.	57 13 0	50 11 11	45 1 8	44 9 10	47 3 6	37 0 0
Oct.	46 8 2	45 0 5	57 5 8	45 1 3	57 11 0	41 0 0
Nov.	50 14 10	41 6 10	51 16 9	42 5 3	44 1 8	40 5 0
Dec.	64 0 4	42 7 0	55 16 4	40 8 6	47 10 5	58 2 6
	612 8 6	570 10 6	655 1 8	560 3 0	585 5 2	539 14 2
	£1182 19 0		£1215 4 8		£1124 19 4	

During the year 2041 yards of new streets were added to those for the scavenging of which this department is responsible.

The staff employed remains the same in point of number, as in the previous year.

The 1611 cart loads of refuse were disposed of as follows :

Ladywell Tip	...	...	337 loads.
Mr. Moore, Peel Green	...	...	116 ...
Mr. Syrratt, Green Lane	...	...	285 ...
Eccles Recreation Ground	...	...	50 ...
Mr. Harrison, Peel Green	...	...	99 ...
Off Marsden Street	...	...	90 ..
The Allotments	..	...	47 ...
Off Parrin Lane	...	...	21 ...
Mr. Ashcroft, New Lane	...	...	51 ...
Mr. Hampson, Winton	..	...	17 ...
Monton Green	...	...	29 ...
Off Peel Green Road	..	...	79 ...
Various other places	...	...	390 ...

It will be noticed that, notwithstanding the exceptionally wet weather which prevailed during the summer, considerably more street watering was done during the year.

The running of the electric tramcars is responsible for this large consumption of water, as owing to the speed and frequency of their running, the surface of the roads soon becomes dry, with the result that the cars would raise a lot of dust if plenty of water was not applied.

The Committee continued the use of "Chloros" in connection with street watering, and its use is likely to be extended during the ensuing year ; there being a noticeable freshness in the air after its use on the roads.

TOWN'S YARD.

The horses in this department were fully employed, and there was very little lost time on account of illness amongst them. The number employed was 19, being two more than in the previous year. One horse was sold during the year owing to unfitness for working on hard roads.

The number of horses remaining at the end of the year was 18.

This department will have fully paid its way, after allowing a sufficient sum for depreciation.

The following are particulars of the provender, &c. consumed during the half-years ended, March 31st, 1903, and Sept. 30th, 1903, when stocks were taken.

PROVENDER ACCOUNT.

Half-year ended March 31st, 1903 :

OATS : 652 bushels, average $2/11$ per bushel	...	...	£95	2	8
BRAN : 1285 scores do. $1/1\frac{1}{2}$ per score	...	...	72	11	$10\frac{1}{2}$
HAY 2968 stones, average $6\frac{1}{4}$ d per stone	...	...	77	8	6
PEAT MOSS : 1 ton 14 cwt.	...	...	3	0	4
BEANS : 6 sacks, average $17/8$ per sack	...	...	5	6	0
STRAW : 1530 stones do. $2\ 5/6$ d. per stone	...	...	18	2	$7\frac{1}{2}$
SUNDRIES : Linseed, Carrots, &c.	...	...	3	6	6
435 weeks keep of horses, averages $12/7\frac{1}{2}$ per week per horse.			£274	18	6

Half-year ended Sept. 30th, 1903 :

OATS : 820 bushels, average cost $2/9\frac{3}{8}$ per bushel...	...	£114	3	4
BRAN---1455 scores, average cost $1/1\frac{1}{4}$ per score.	...	80	7	$3\frac{1}{2}$
CLOVER HAY : 3754 stones do. $55/16$ d. per stone.	...	93	1	2
STRAW : 2036 stones do. $2\frac{3}{4}$ d. do.	...	23	6	7
BEANS : 2 sacks do. 18/0	...	1	16	0
PEAS : 4 sacks, do. $16/10\frac{1}{2}$ per sack	...	3	7	6
GREEN CLOVER 384 stones ... ..	...	2	12	9
SUNDRIES—Linseed, Condiment, &c. ... ..	...	6	5	0
<hr/>				
494 weeks keep of horses, averages $13/1\frac{3}{4}$ per week per horse.		£324	19	$7\frac{1}{2}$
		<hr/> <hr/>		

The following particulars of wages paid, and other information relating to the employes of the Cleansing and Scavenging Committee may be of interest.

CLEANSING DEPARTMENT.

Foreman	-	30/- per week
6—8 Labourers	-	25/- per week each for 39 loads
2 Tipmen	-	21/- per week each
3 Ashtub men	-	25/- per week each, with 6d. each for each load above the aggregate of 51 per week.

SCAVENGING DEPARTMENT.

Foreman	-	29/- per week.
7 Sweepers	-	22/- per week.
2 Handcart men	-	22/- per week.

One sweeper has 2/- per week extra for cleansing Barton Lane urinal and the Market Place on Sunday, and three others have 1/6 each extra for Scavenging the Market Place and main road on Sundays.

TOWN'S YARD DEPARTMENT.

Horsekeeper	-	30/- per week with house, coal, and light.
Highway Carters	-	24/- per week each.
Scavenging Carters	-	25/- per week each.
Nightsoil Carters	-	25/- per week each.

The number of carters employed in each department, varies with the demand. Usually five are employed in the highways work, three scavenging, and eight in nightsoil and ashtub work. One carter is paid 1/6 for Sunday work on main road. All overtime worked is paid for.

HOLIDAYS.

New Year's Day, Good Friday, Friday and Saturday in Whit-Week, Pic-Nic Saturday (usually in August), and Christmas Day. Total six working days.

CLOTHES.

The scavengers are provided with great coats, every alternate year, and with trousers, hats, and leggings each year.

All other employees have sleeved vests every alternate year, and trousers, hats, and leggings each year.

I am, Gentlemen,

Yours obediently,

C. W. LASKEY.



